

SERVICE
MANUAL

PM683

4822 725 50877

marantz®

model PM683

Stereo Amplifier

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound.

Only **original MARANTZ parts** can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS:

Parts can be ordered either by mail or by telex. In both cases, correct part number has to be specified. The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or telex must be signed otherwise such part order will be considered as null and void.

PARTS ORDERING

Parts may be ordered at the following addresses:

AUSTRIA HORNYPHON Vertriebsgesellschaft GmbH Wienerbergstrasse 1 A 1101 Wien Austria Telex: 132.332	FINLAND MARANTZ DIVISION OF OY PHILIPS Ab Kaivokatu 8 00100 Helsinki Finland Telex: 124811	GREAT BRITAIN MARANTZ AUDIO U.K. Ltd Unit 15/16 Saxon Way Industrial Estate Moor Lane Harmondsworth UB7 0LW Great Britain Telex: 935196	SAUDI ARABIA AL ALAMIAH ELECTRONICS P.O.Box 5954 University Street Riyadh 11432 Saudi Arabia Telex: 401530	SWITZERLAND DYNAXOX ELECTRONICS Route de Villars 105 1701 Fribourg Switzerland Telex: 942377
BELGIUM SVD DIVISION MARANTZ Industrialaan 1 1720 Groot-Bijgaarden Belgium Telex: 24466	FRANCE MARANTZ FRANCE 4 Rue Bernard Palissy 92600 Asnières France Telex: 611651	GREECE SHERTON ELECTRONICS S.A. P.O.Box 21025 Hippocrates Street 188 Athens 11471 Greece Telex: 216.795	SOUTH AFRICA MARANTZ DIVISION OF PHILIPS S.A. Main Road Martindale P.O. Box. 58088 Newville 21114 South Africa	TURKEY DOGRUOL Ltd. I.M.C. 6 Blok N°6310 Unkapani Istanbul Turkey Telex: 22085
CHILE MARANTZ DIVISION OF PHILIPS S.A. AV. Santa Maria, 0760 Casilla 2687 Santiago Telex: 240.239	GERMANY MARANTZ GERMANY GmbH Max-Planck-Strasse 22 6072 Dreieich 1 Germany Telex: 529821	JAPAN MARANTZ JAPAN, Inc. 35-1, 7-chome, Sagamiyama Sagamiyama-shi, Kanagawa Japan	SPAIN PHONO S.A. Ignacio Iglesias 10 Badalona (Barcelona) Spain Telex: 59355	MALTA CACHIA & GALEA Republic Street, 68D Valeta Telex: 1682
DENMARK MARANTZ DIVISION OF PHILIPS SERVICE A/S Prags Boulevard 80 Postbox 1919 DK-2300 København S Denmark Telex: 31201	THE NETHERLANDS Elpro Marantz Wint Houtlaan 28 3526 KV Utrecht The Netherlands Telex: 4748	KUWAIT AL ALAMIAH ELECTRONICS Ussama Building Fahd al Saleem Street P.O.Box 23781 Safat-Kuwait Telex: 22694	SWEDEN MARANTZ DIVISION OF PHILIPS Försäljning AB Tegeluddsvägen 1 S-115 84 Stockholm Sweden Telex: 14060	PORTUGAL MARANTZ Divisao philips S.A. service Ourela-carnaxide 2795 Linda-A-VELHA Telex: 43906
	NORWAY MARANTZ DIVISION OF PHILIPS A/S Sandstuveien 40 0680 Oslo 6 Norway Telex: 72640	ITALY MARANTZ ITALIANA S.P.A. Via Chiese, 74 20126 Milano Italy		

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.

In case of difficulties, do not hesitate to contact the Technical Department at abovementioned address.

1. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model PM683 Stereo Amplifier.

Item	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
ACVTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
Circuit Tester	Trouble shooting
DCVTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors potential of primary power to amplifier
Variable Autotransformer (0 to 140V AC, 10A)	Adjust level of primery power to amplifier
Shorting Plug	Shorts amplifier input to eliminate noise pickup

2. P.W. BOARDS

As can be seen from the circuit diagram the chassis of Model PM683 consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Relay mounted on P.W. Board PA14
2. Connector mounted on P.W. Board PJ14
3. Video Amp mounted on P.W. Board PL04
4. Pin Jack/Switch mounted on P.W. Board PL14
5. R.G.B. Connector..... mounted on P.W. Board PL24
6. Selector mounted on P.W. Board PS04
7. REC Selector mounted on P.W. Board PS34
8. Speaker Switch mounted on P.W. Board PS44
9. Function-1 mounted on P.W. Board PS84
10. Speaker Terminal..... mounted on P.W. Board PT04
11. U-COM FL Driver mounted on P.W. Board PU04
12. F.I.P. Circuit Board ... mounted on P.W. Board PU14
13. Tact Switch mounted on P.W. Board PU24
14. Tact Switch mounted on P.W. Board PU34
15. Dolby Sorround mounted on P.W. Board P604
16. Power Amp Driver mounted on P.W. Board P704
17. Transistor (DOLBY) ... mounted on P.W. Board P714
18. Transistor (DOLBY) ... mounted on P.W. Board P724
19. Transistor (DOLBY) ... mounted on P.W. Board P734
20. Power Amp/Supply ... mounted on P.W. Board P754
21. Regulator mounted on P.W. Board P801
22. Regulator mounted on P.W. Board P802

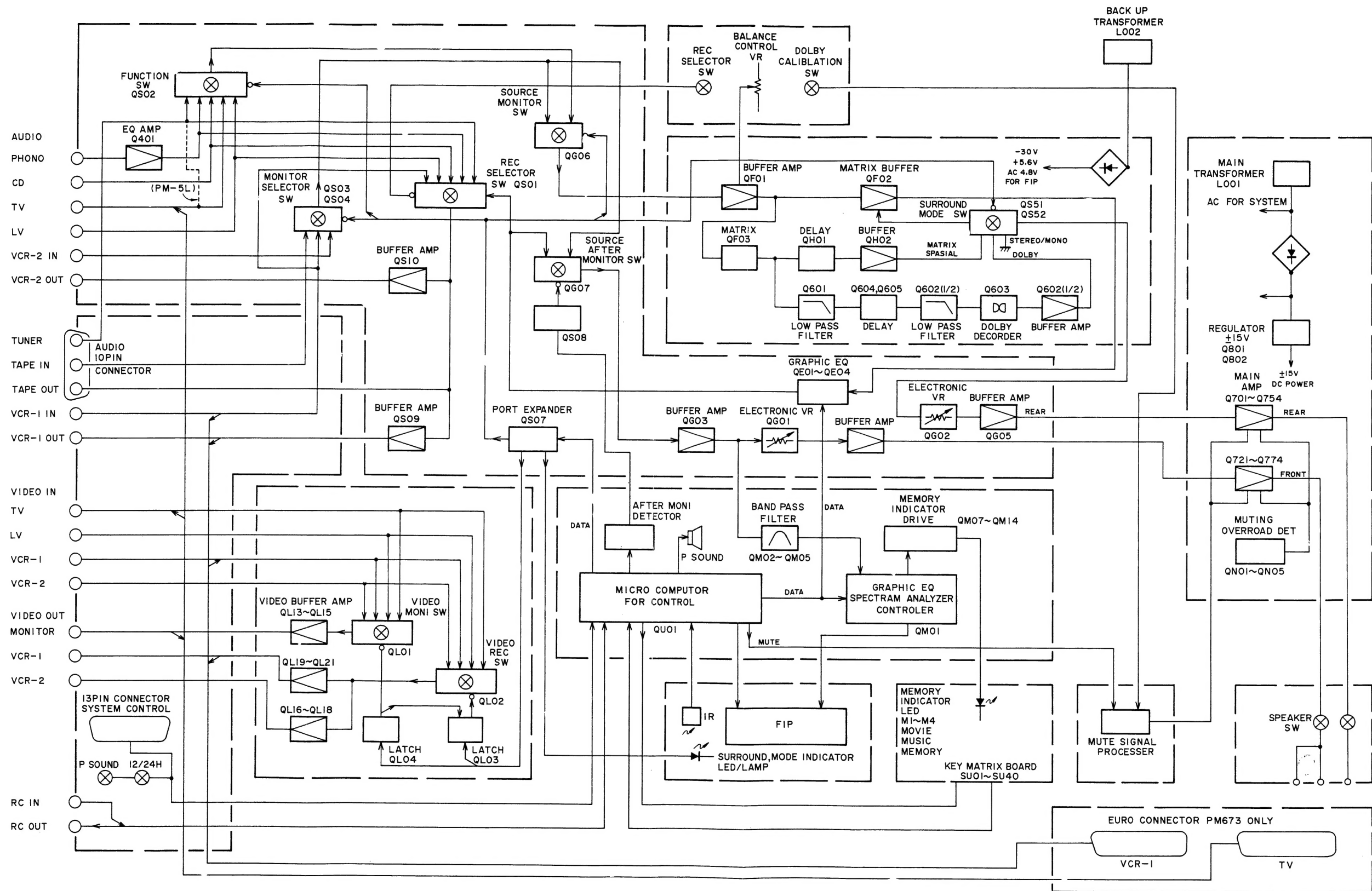
3. ADJUSTMENT PROCEDURES

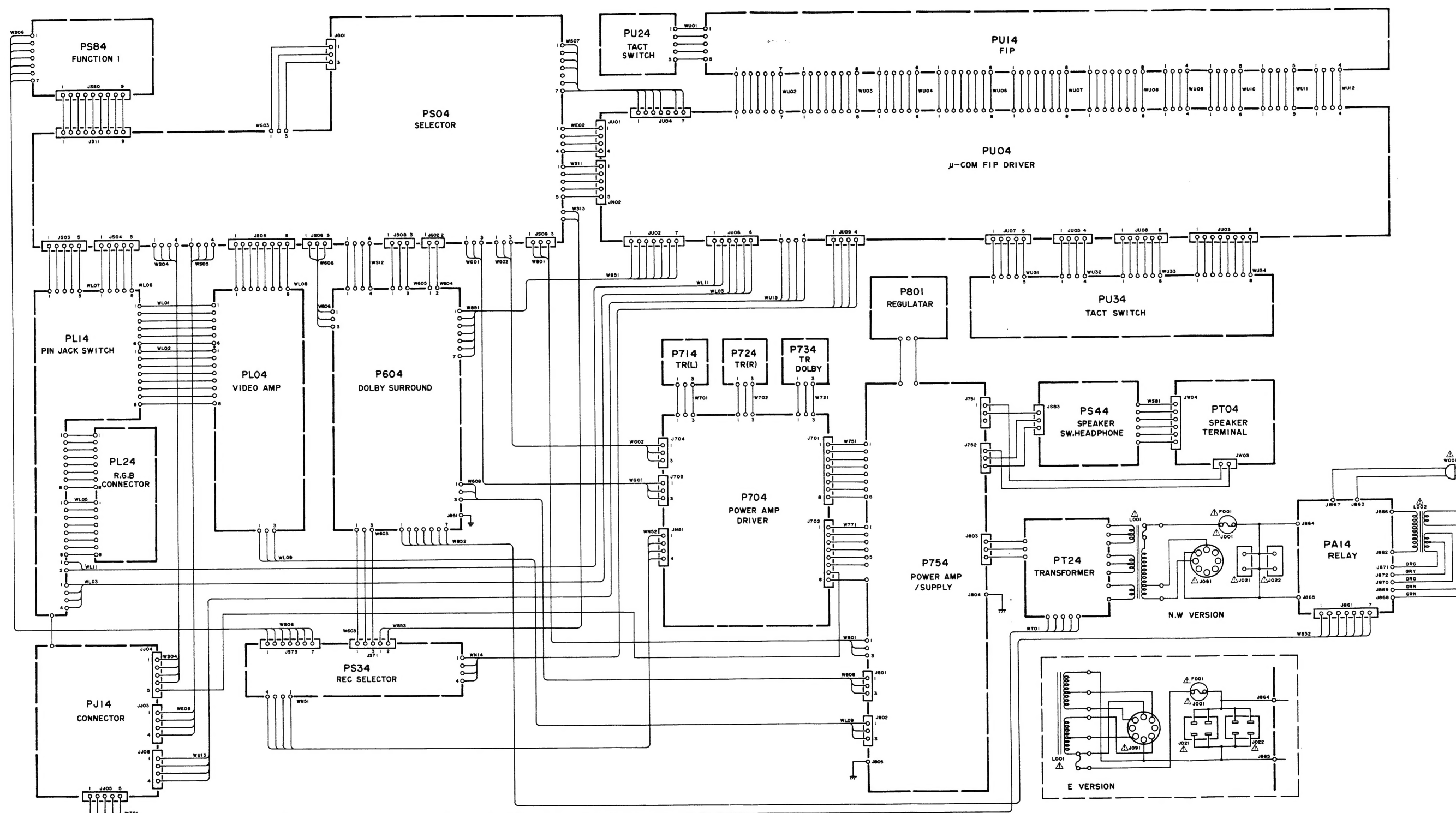
• Adjustment of Main Amp Idling Current

Connect a digital voltmeter to the R755, R756, and R776 emitter resistor adjustment terminals, turn the power on, then adjust variable resistors R711, R712, and R731 when the power becomes stable so that the reading on the voltmeter is between 1 mV and 1.5 mV.

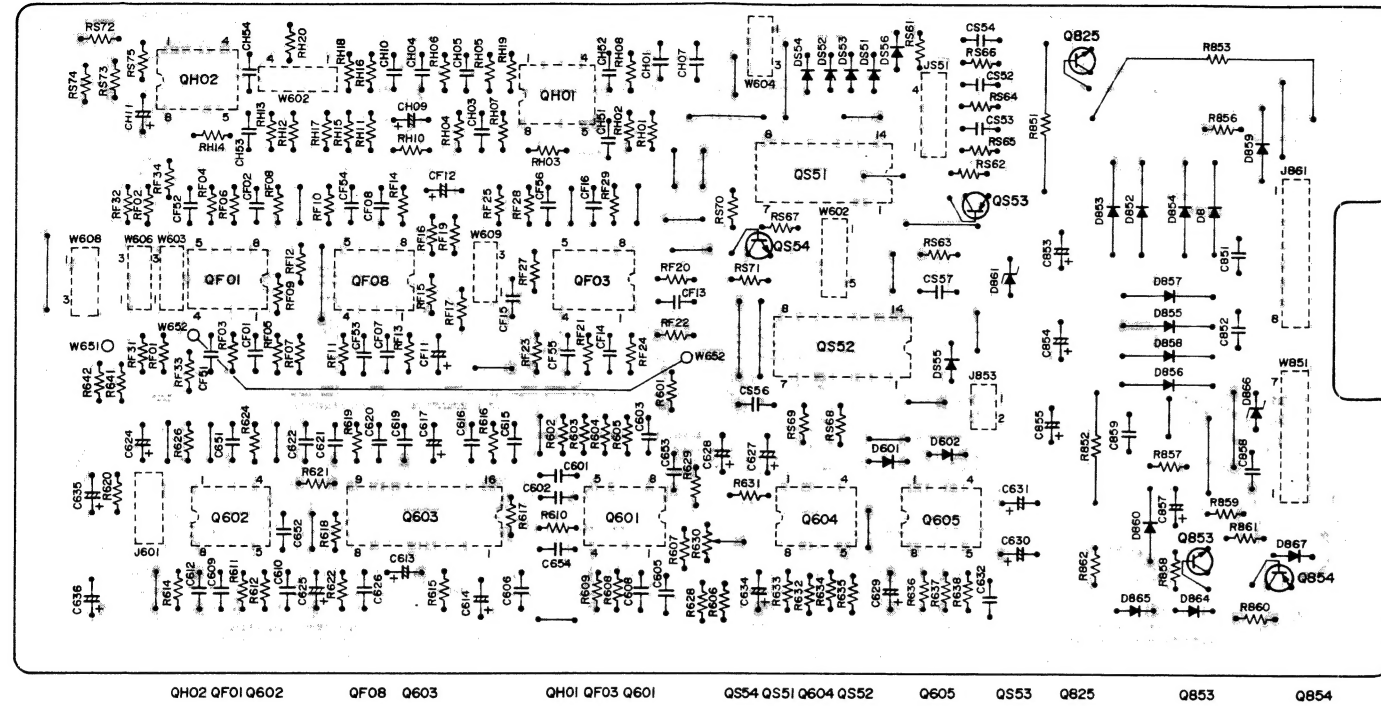
• Adjustment of Dolby Surround Output Distortion

Input 1 kHz to the L or R input terminals, set the mode switch to Dolby Surround, increase the input for a voltage of 1.6 V at the test point (J601), then adjust variable resistor R630 so that the distortion is minimum.

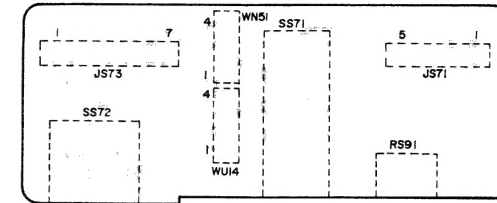




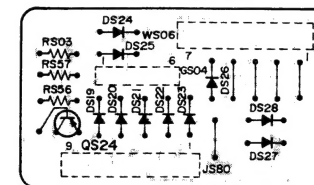
P604 - DOLBY SURROUND



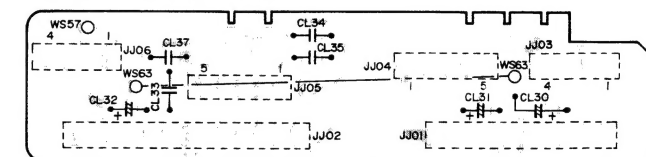
PS34-REC SELECTOR



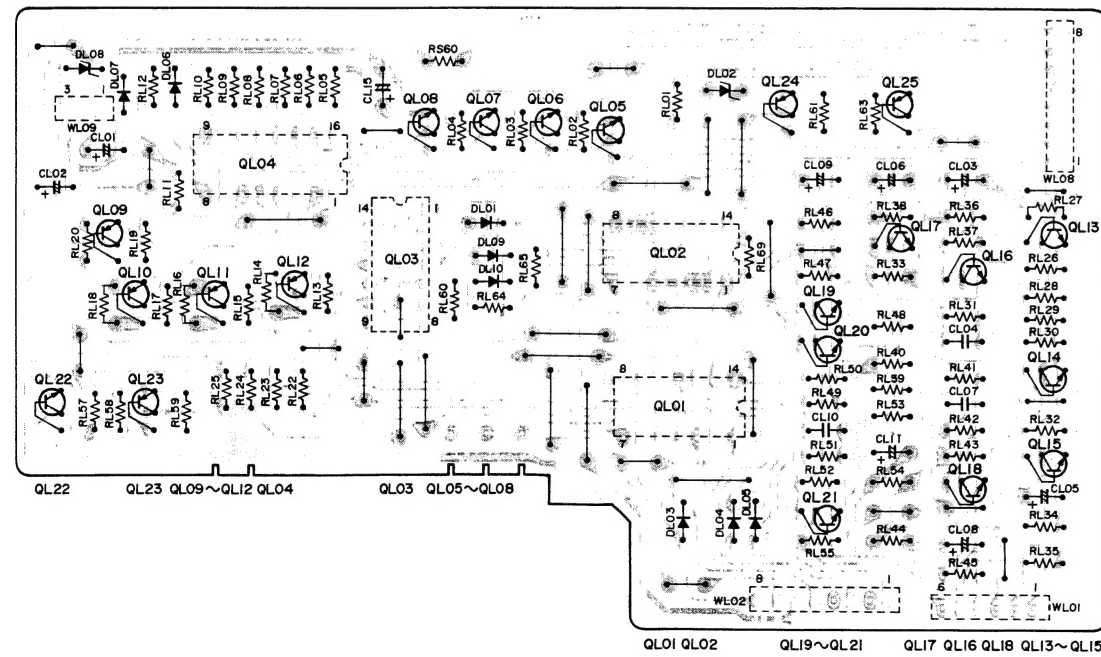
PS84 - FUNCTION



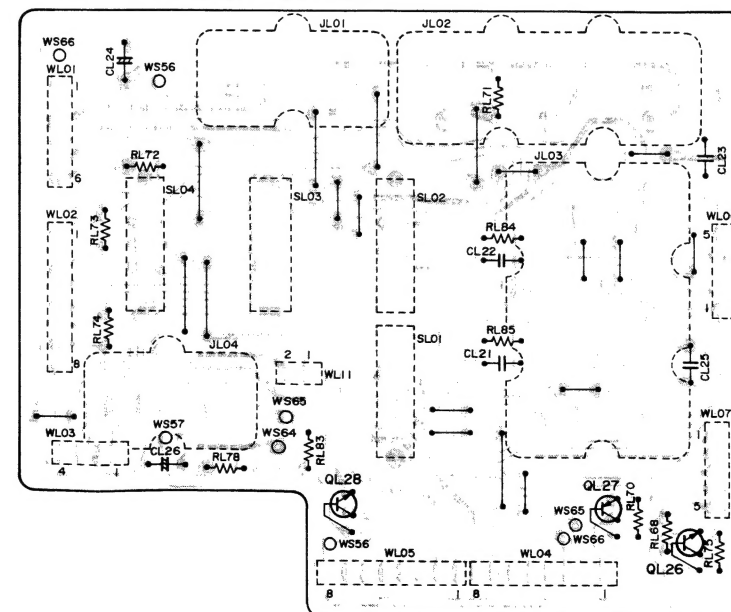
PJ14 - CONECTOR



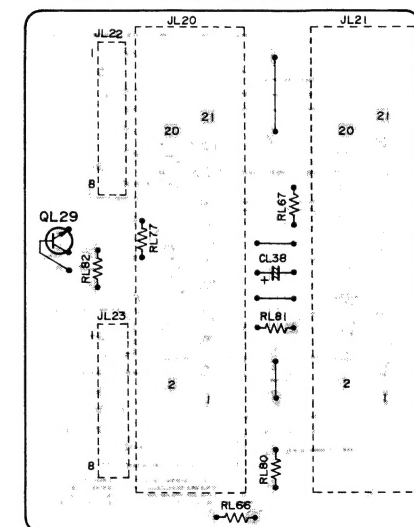
PLO4-VIDEO AMP

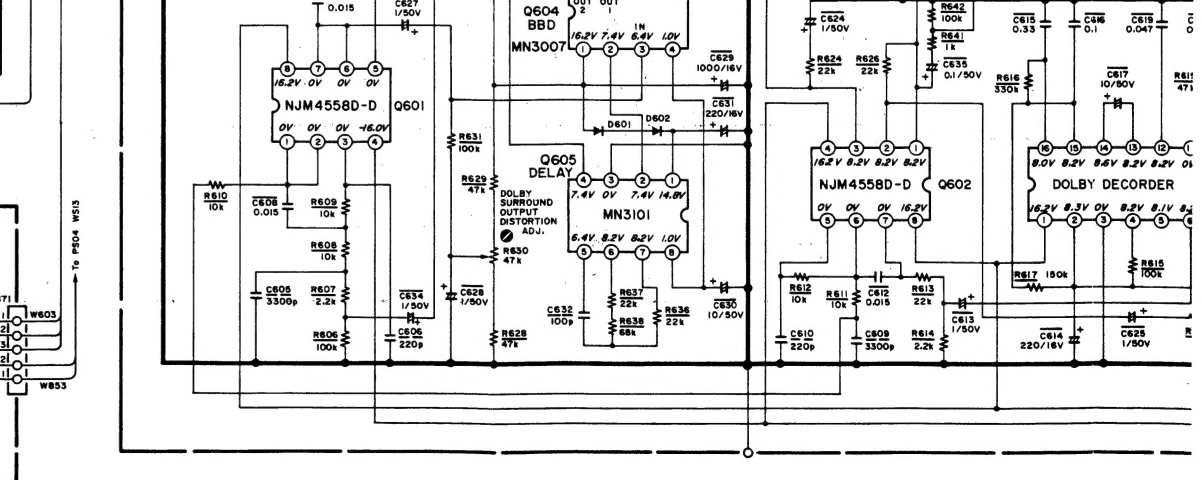
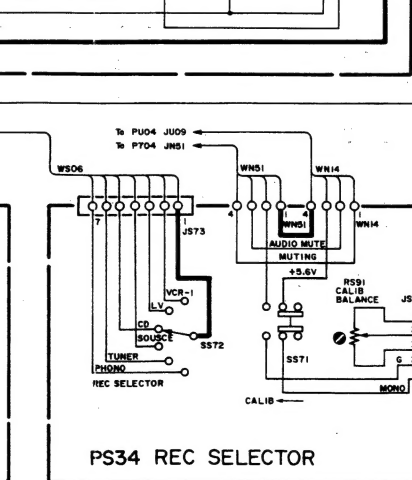
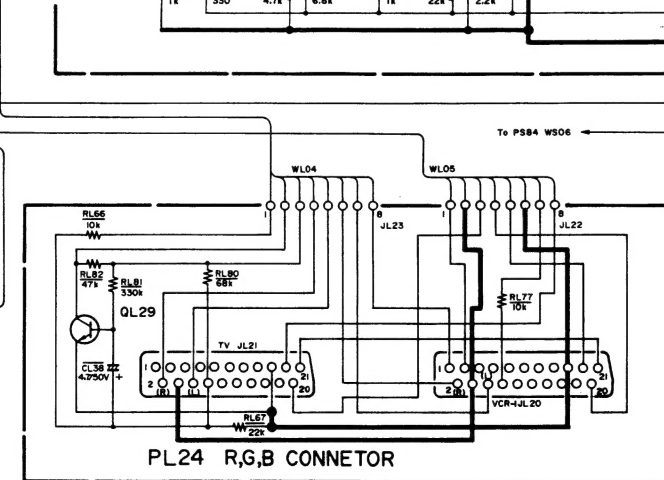
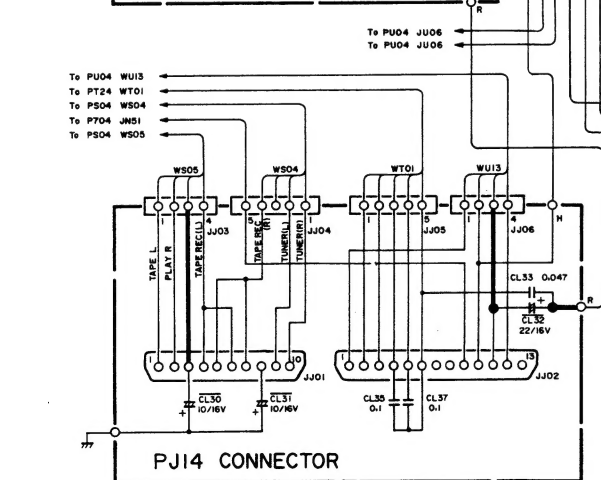
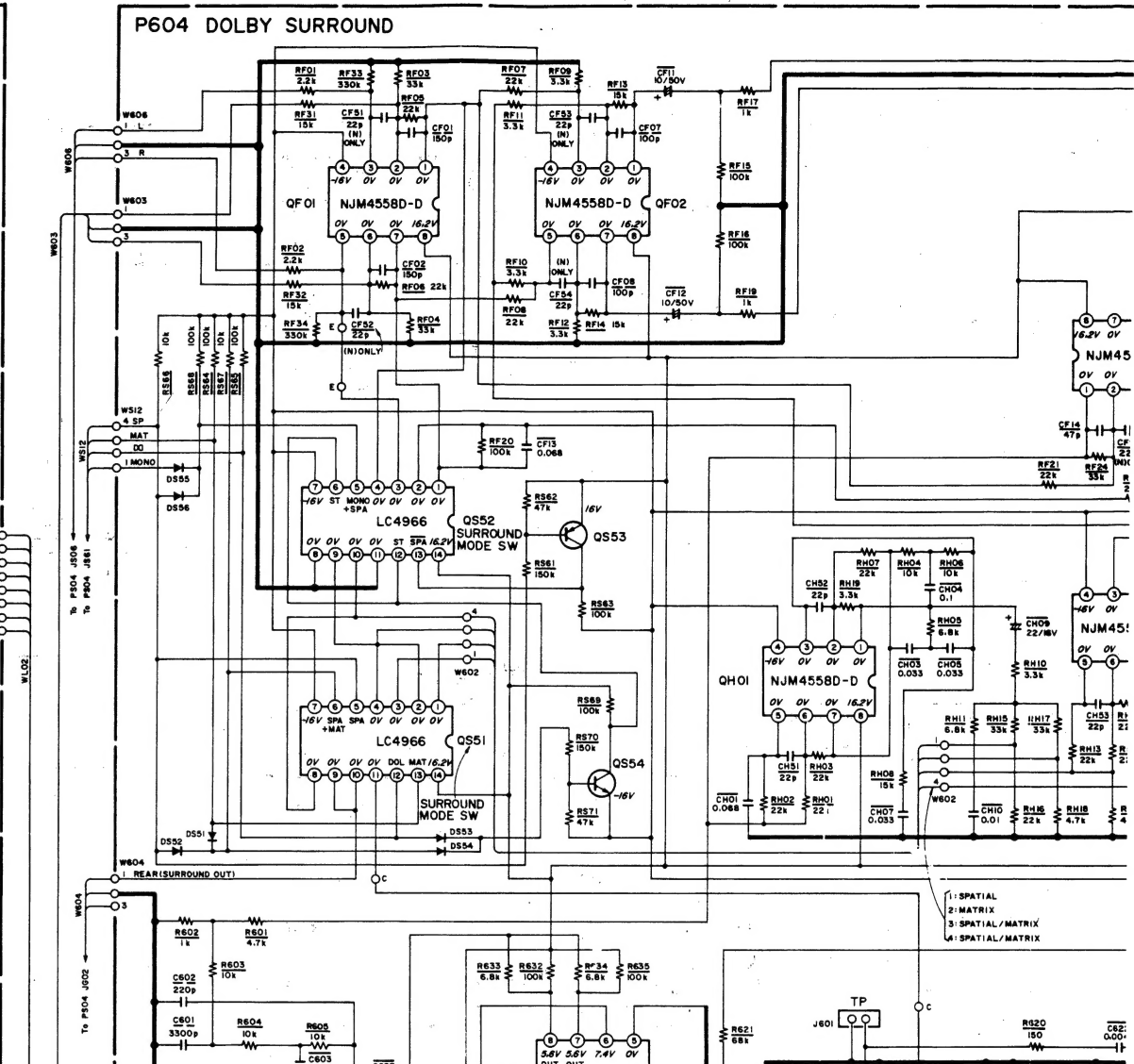
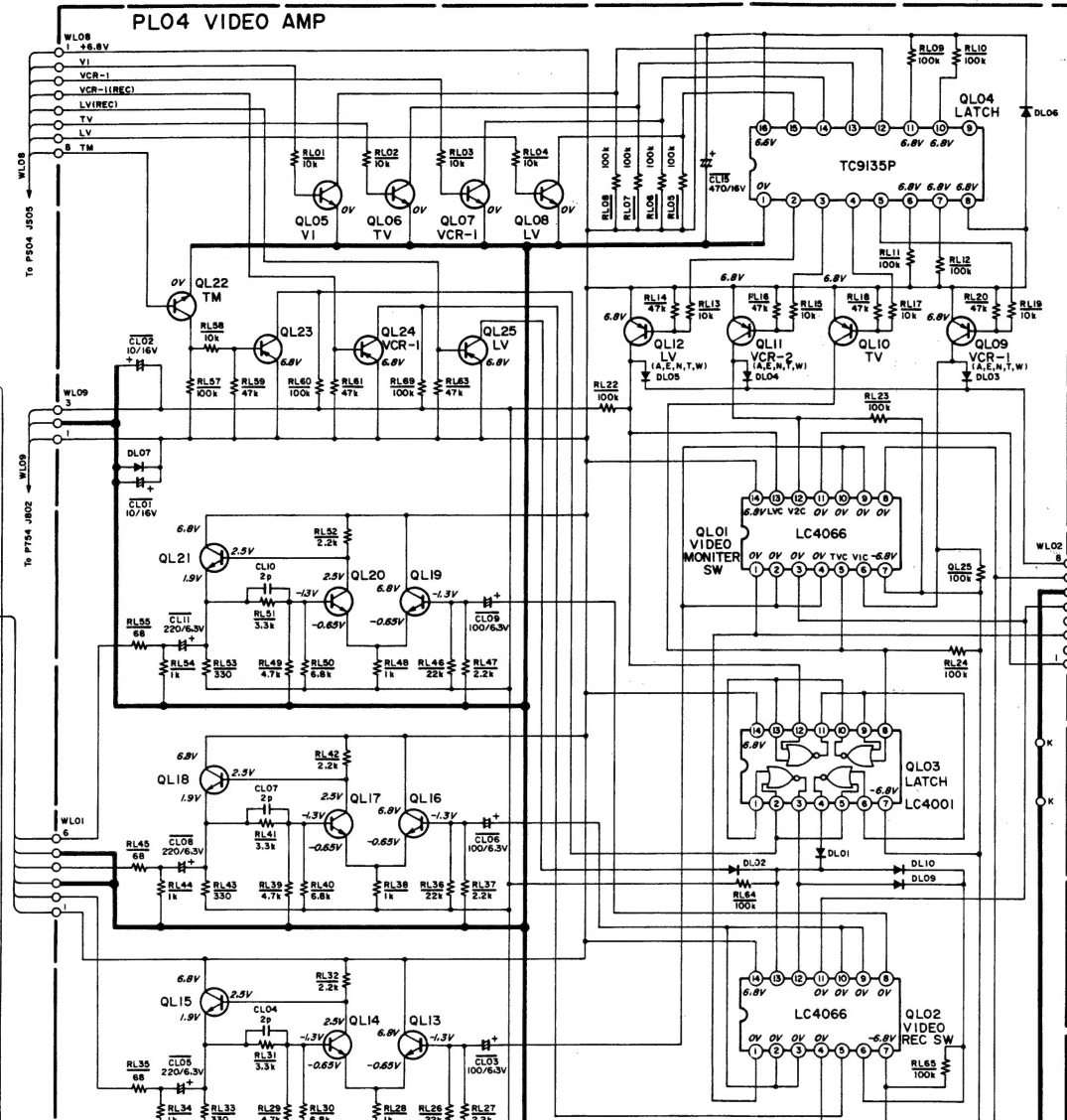
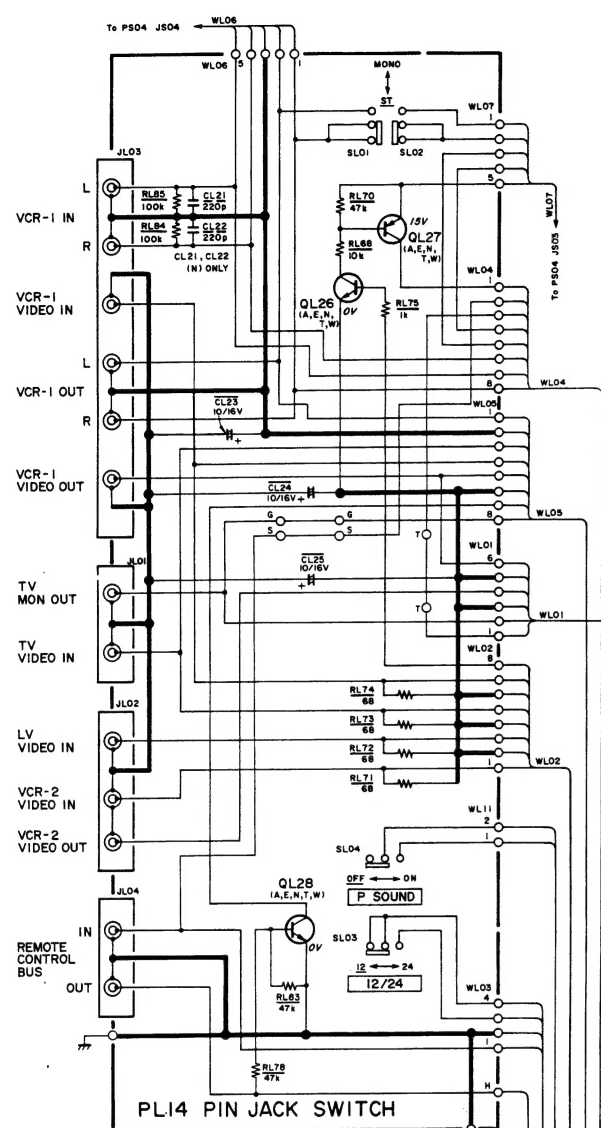


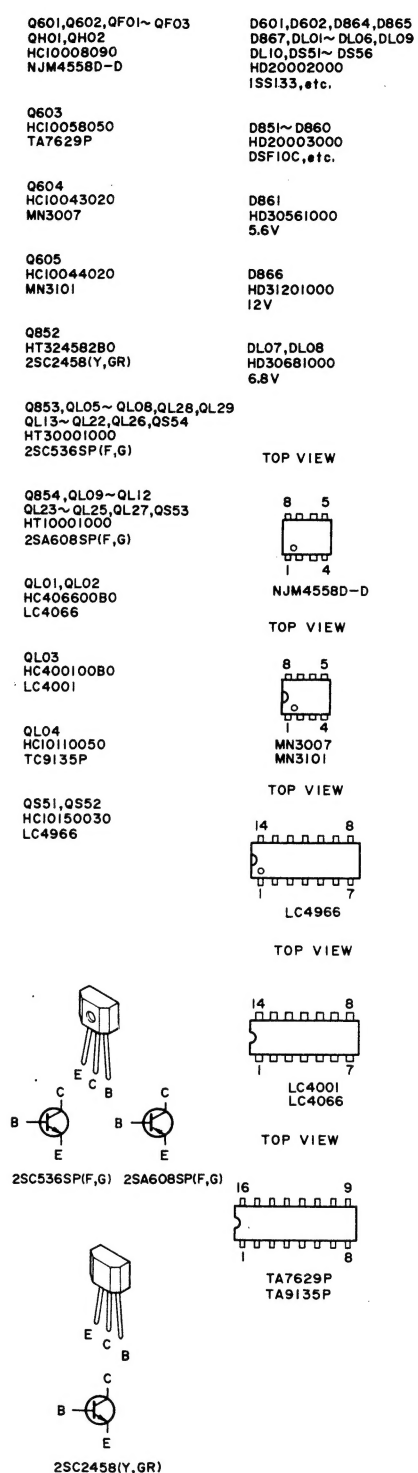
PL14 - PIN JACK SWITCH



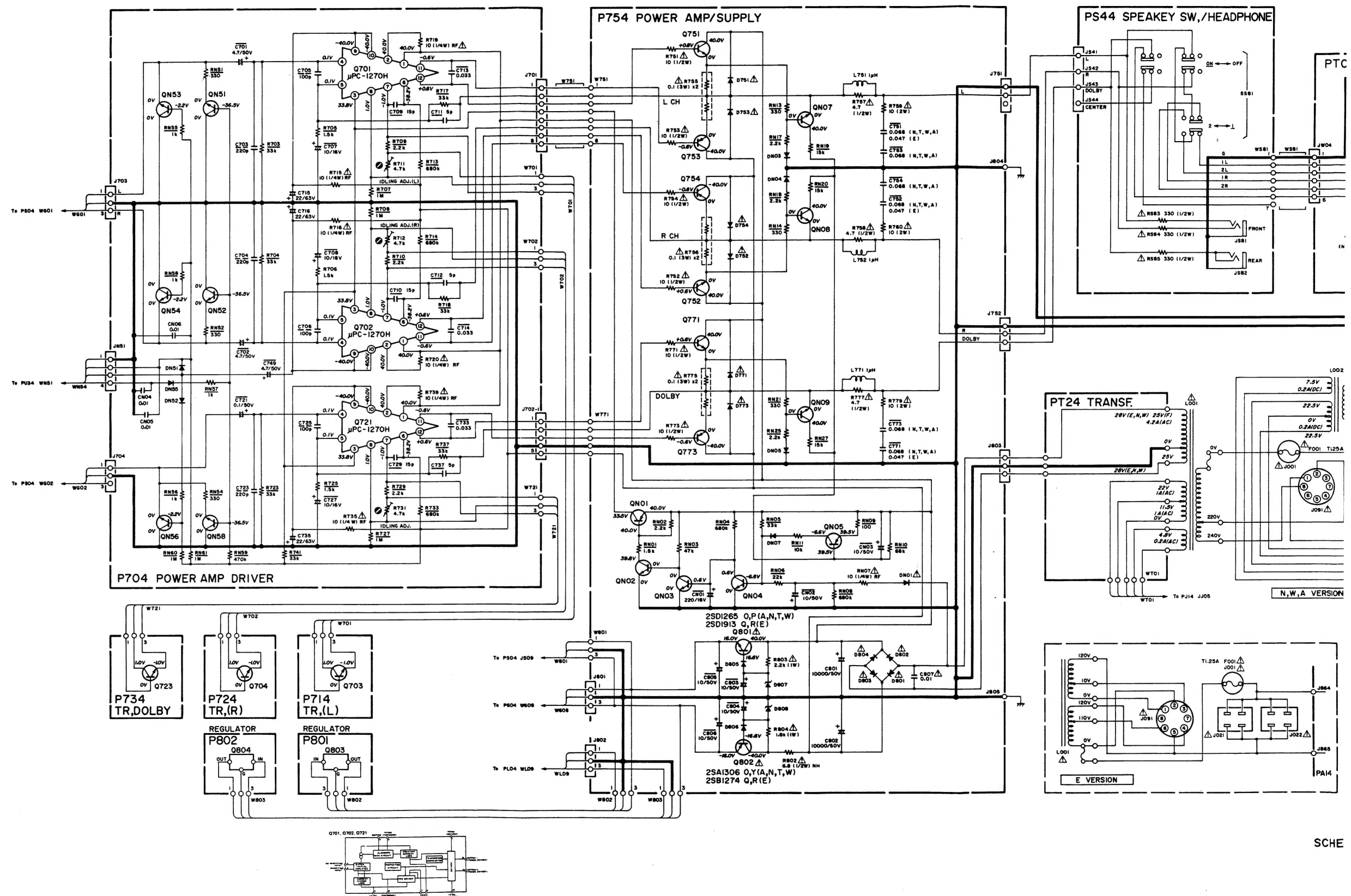
PL24-R.G.B. CONECTOR



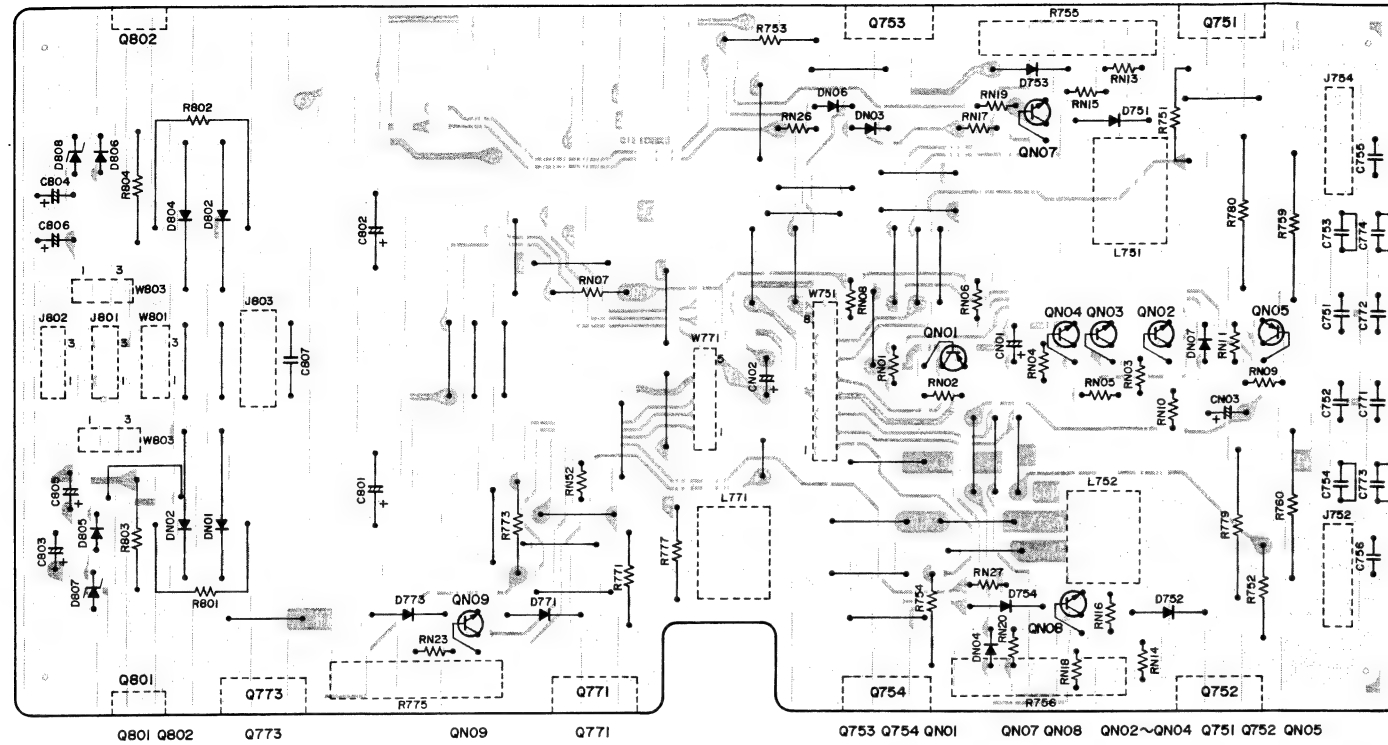




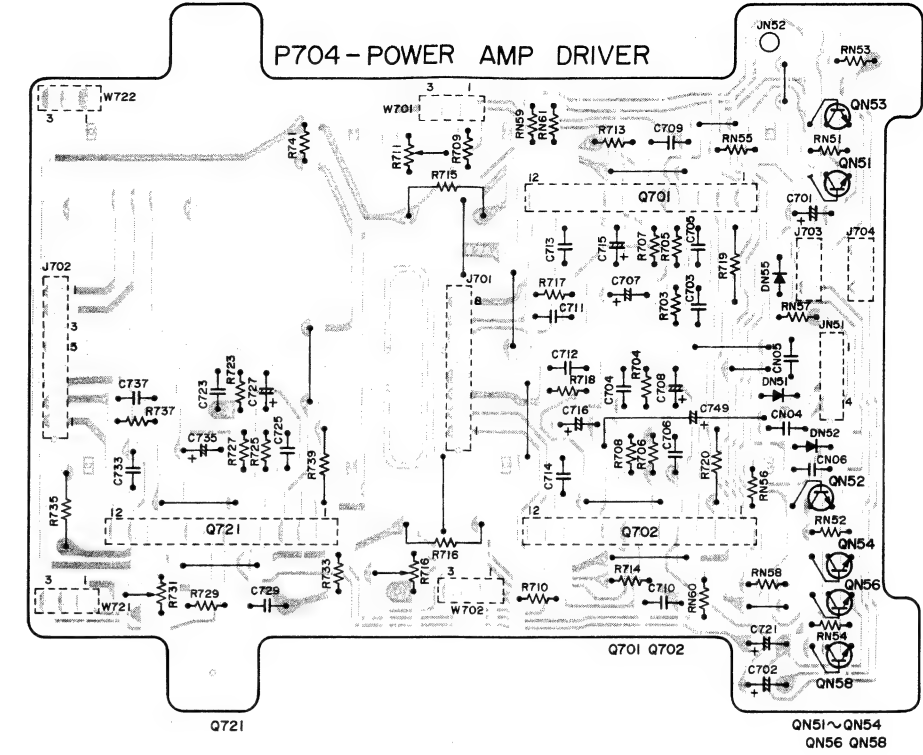
PS34 REC SELECTOR



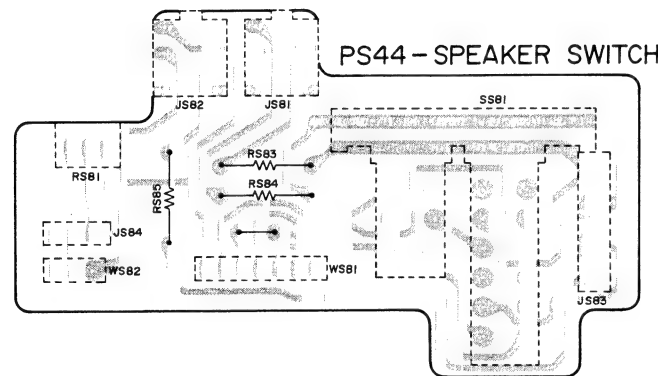
P754 - POWER AMP/SUPPLY



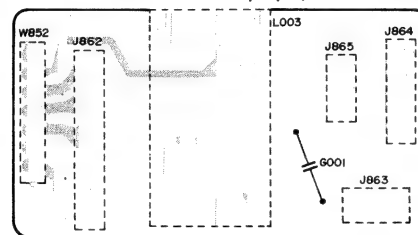
P704 - POWER AMP DRIVER



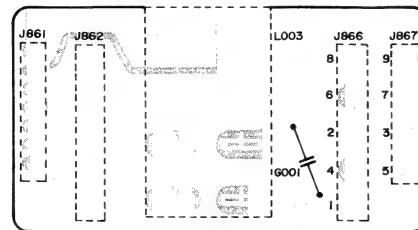
PS44 - SPEAKER SWITCH

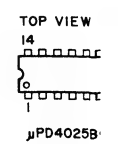


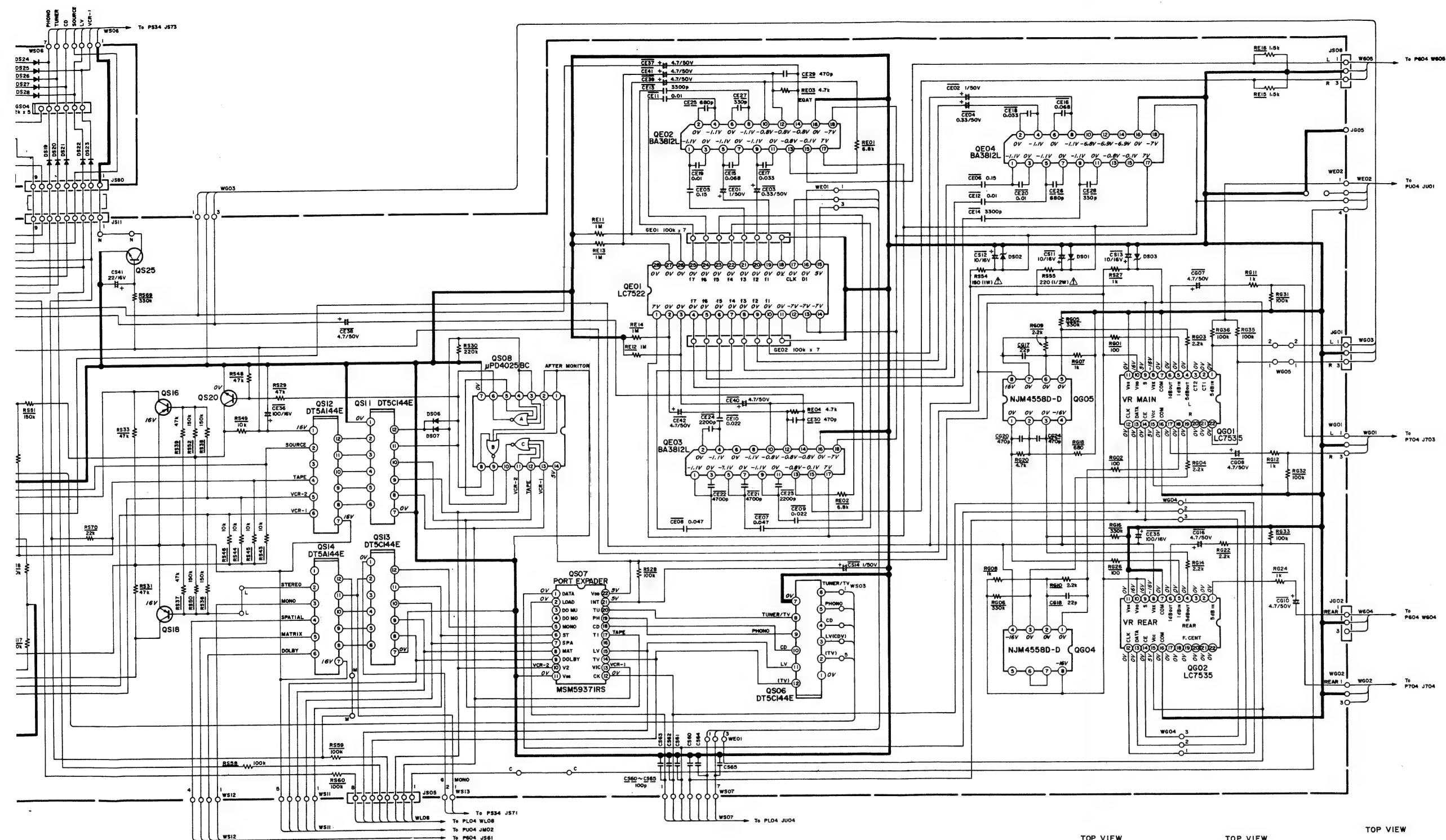
PA14 - RELAY (A,N,T,W) VERSION



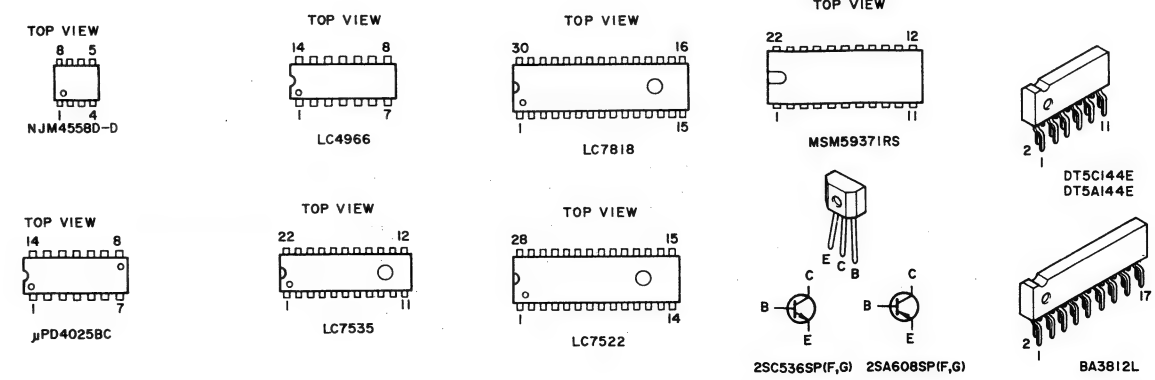
PA14 - RELAY (E) VERSION



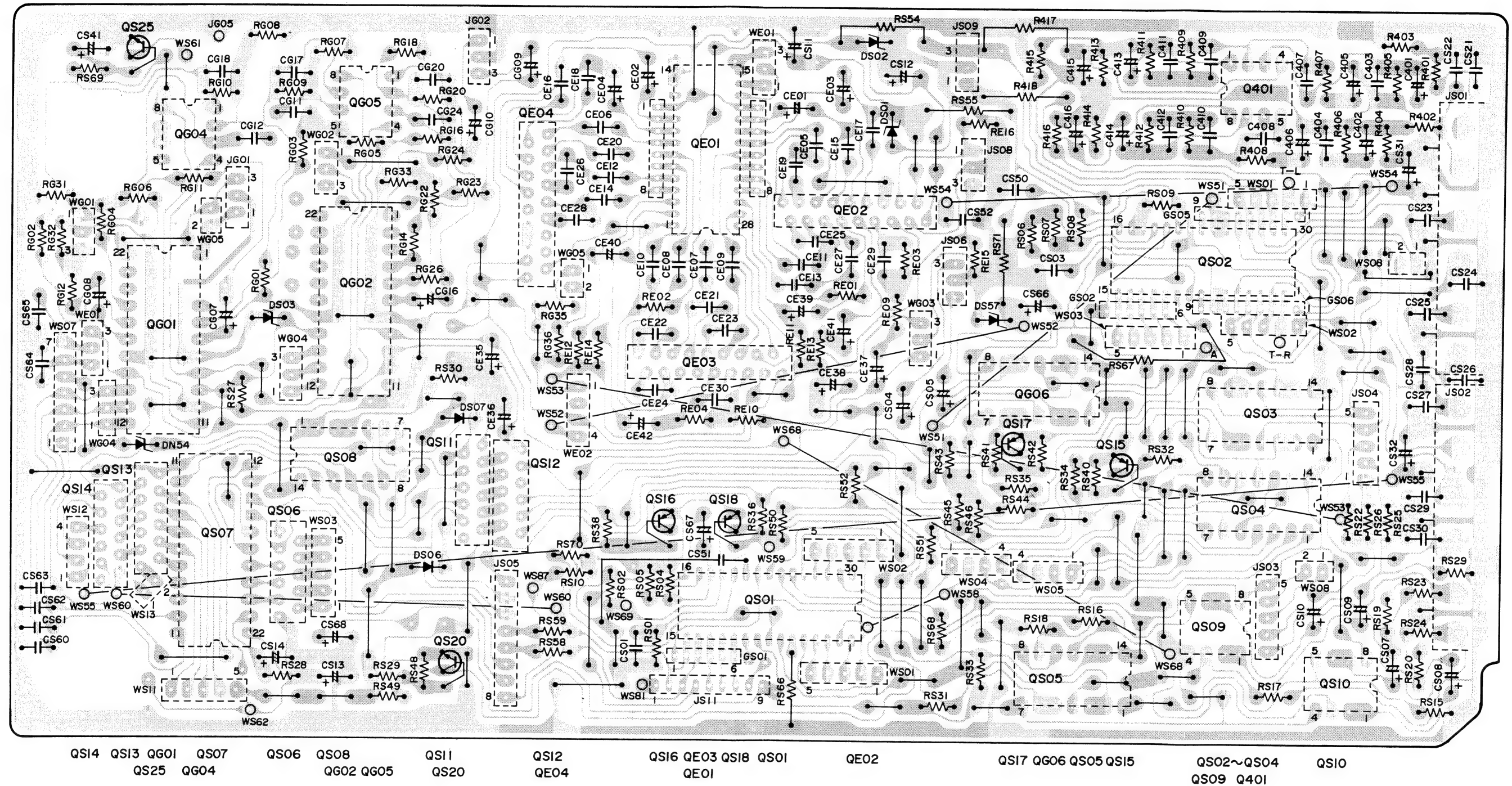




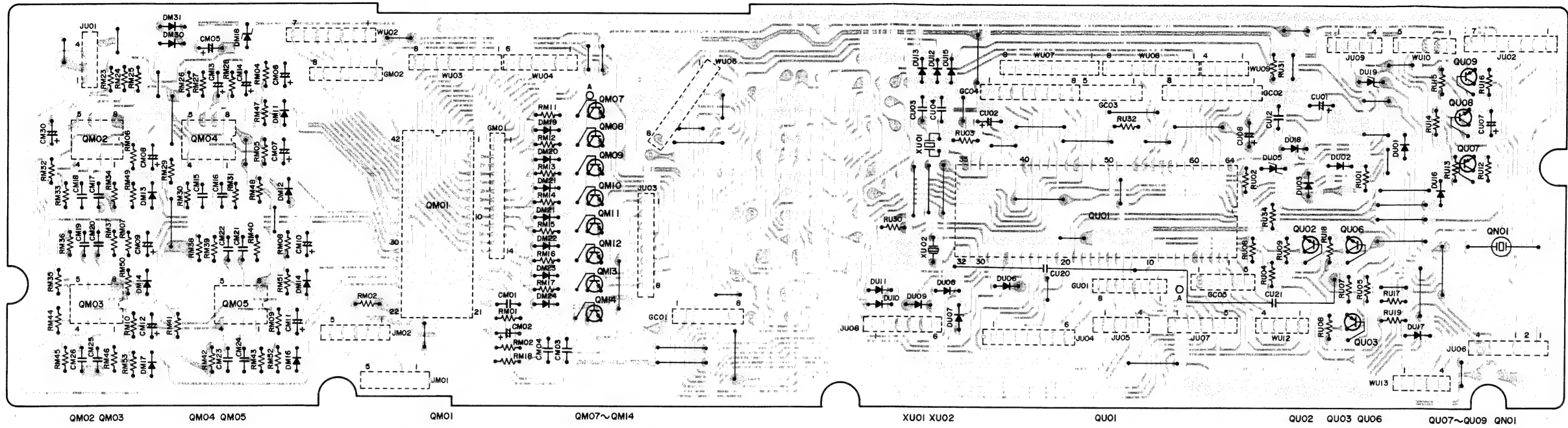
- QE01
HC10216030
LC7522
- QE02~QE04
HC10052210
BA3812L
- QG01
HC10217030
LC7535
- QG04, QG05, QG09
QS10, Q401
HC10008090
NJM4558D-D
- QG06
QS03~QS05
HC10150030
LC4966
- QS01, QS02
HC10168030
LC7818
- QS06, QS11, QS13
HC10069210
DT5C144E
- QS07
HC10001260
MSM59371RS
- QS08
HC40250080
μPD4025BC
- QS12, QS14
HC10068210
DT5A144E
- QS15~QS18
QS24
HT10001000
2SA608SP(F,G)
- QS20, QS25
HT30001000
2SC536SP(F,G)
- DS01, DS02
HD30681000
6.8V
- DS03
HD30511000
5.1V
- DS04~DS07
DS19~DS28
HD20002000
ISS133, etc.



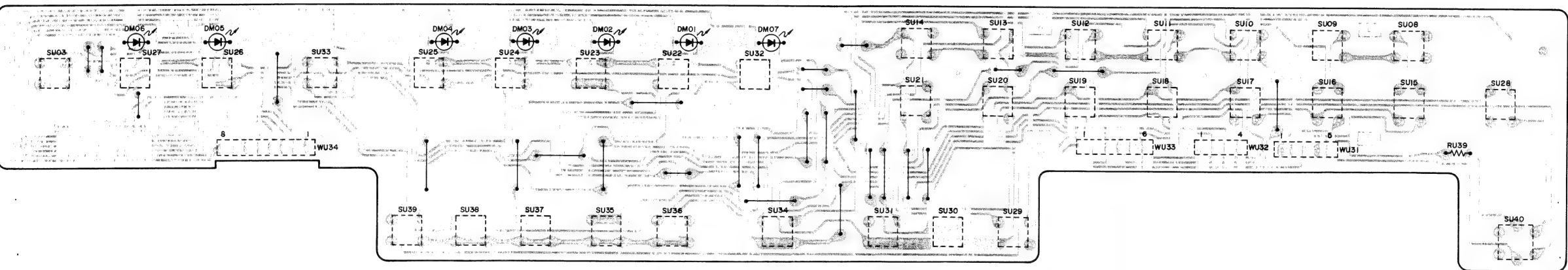
PS04 - SELECTOR



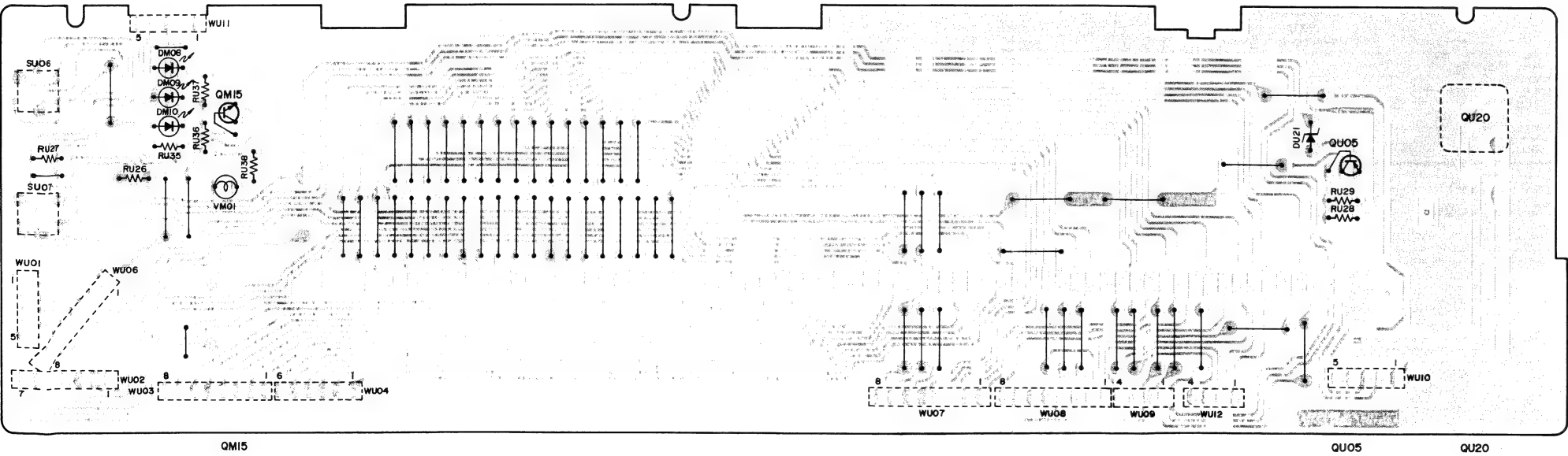
PU04 - μ -COM



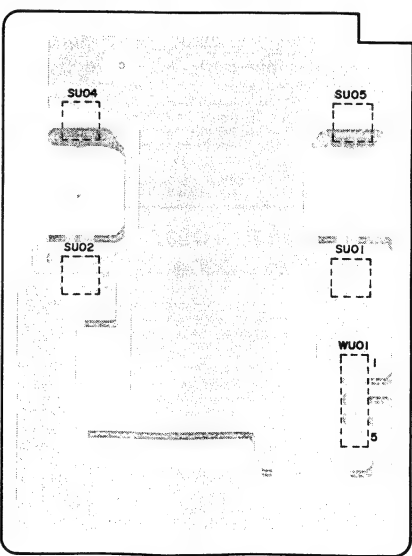
PU24 - TACT SWITCH

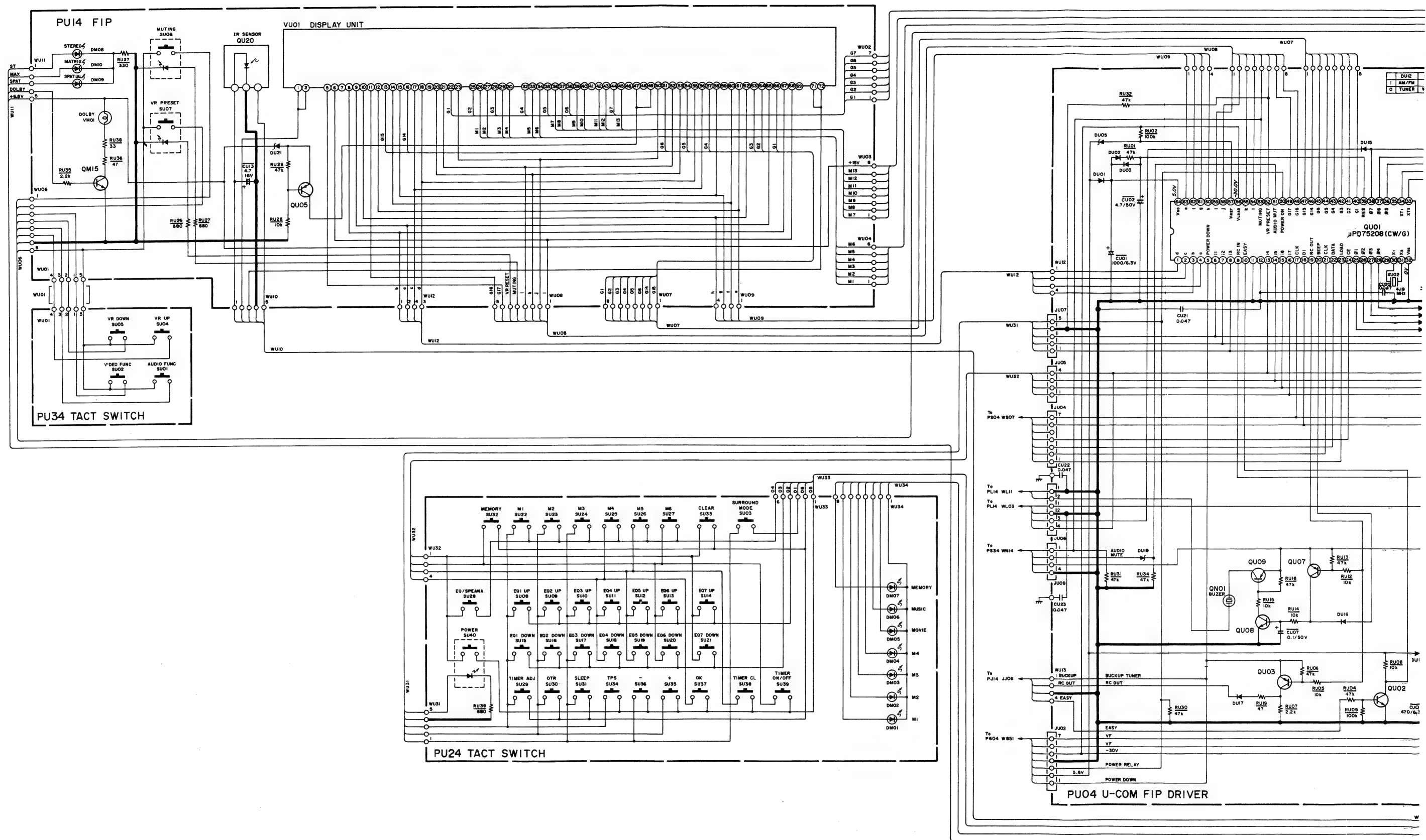


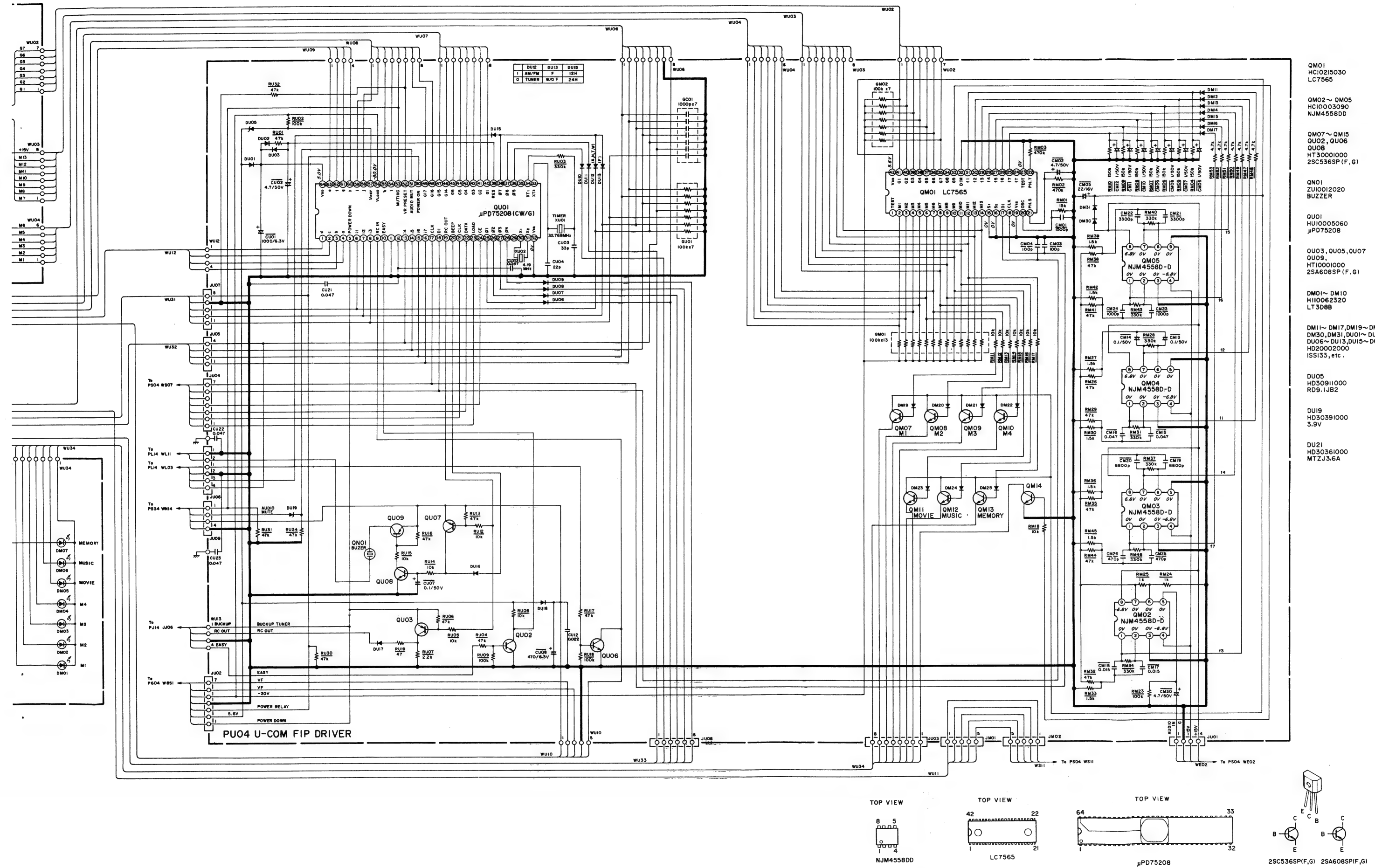
PUI4 - FIP



PU34 - TACT SWITCH







ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR
R***: (1) GD05 --- 140, Carbon film fixed resistor, ±5%, 1/4W
R***: (2) GD05 --- 160, Carbon film fixed resistor, ±5%, 1/6W
① — Resistance value

Examples
① Resistance value
0.1Ω...001 10Ω...100 1kΩ...102 100kΩ...104
0.5Ω...005 18Ω...180 2.7kΩ...272 680kΩ...684
1Ω...010 100Ω...101 10kΩ...103 1MkΩ...105
6.8Ω...068 390Ω...391 22kΩ...223 4.7MkΩ...475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

C***: CERAMIC CAP.
(1) DD1 --- 370, Ceramic condenser
Disc type
Temp. coeff. P350 ~ N1000, 50V
①②
Capacity value
Tolerance

Examples
① Tolerance (Capacity deviation)
±0.25pF...0
±0.5pF...1
±5%...5
* Tolerance of COMMON PARTS handled here are as follows:
0.5pF ~ 5pF...±0.25pF
6pF ~ 10pF...±0.5pF
12pF ~ 560pF...±5%
② Capacity value
0.5pF...005 3pF...030 100pF...101
1pF...010 10pF...100 220pF...221
1.5pF...015 47pF...470 560pF...561

C***: CERAMIC CAP.
(1) DK16 --- 300, High dielectric constant ceramic condenser
Disc type
Temp. chara. 2B4, 50V
①
Capacity value

Example
② Capacity value
100pF...101 1000pF...102 10000pF...103
470pF...471 2200pF...222

C***: ELECTROLY CAP. (⚡), FILM CAP. (±)
(1) EA --- 10, Electrolytic condenser
One-way lead type, Tolerance ±20%
①②
Dielectric strength
Capacity value

Examples
① Capacity value
0.1μF...104 4.7μF...475 100μF...107
0.33μF...334 10μF...106 330μF...337
1μF...105 22μF...226 1100μF...108
2200μF...228
② Working voltage
6.3V...006 25V...025
10V...010 35V...035
16V...016 50V...050

(2) DF15 --- 350, Plastic film condenser
One-way type, Mylar ±5% 50V
①
Capacity value

Examples
① Capacity value
0.001μF (1000pF)...102 0.1μF...104
0.0018μF...182 0.56μF...564
0.01μF...103 1μF...105
0.015μF...153

5. ELECTRICAL PARTS LIST

REF. DESIG.	PART NO.	DESCRIPTION
G001	4822 122 40305	PA14-RELAY CIRCUIT BOARD Ceramic Cap. 0.01μF 400V
L003	4822 280 70219 4822 280 70331	Relay [N, W, A] Relay [E]
JJ01 JJ02	4822 266 30305 4822 266 30306	PJ14-CONNECTOR CIRCUIT BOARD Terminal, 10P Terminal, 13P
CL33 CL35 CL37	4822 122 40306 4822 122 40617 4822 122 40617	Ceramic Cap. 0.047μF +80% -20% Ceramic Cap. 0.1μF +80% -20% Ceramic Cap. 0.1μF +80% -20%
CL04 CL07 CL10	4822 122 40297 4822 122 40297 4822 122 40297	PL04-VIDEO AMP CIRCUIT BOARD Ceramic 2pF ±0.25pF Ceramic 2pF ±0.25pF Ceramic 2pF ±0.25pF
DL01 DL02 DL03 DL04 DL05 DL06 DL07 DL09 DL10	4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305	PL04-CAPACITOR Ceramic 2pF ±0.25pF Ceramic 2pF ±0.25pF Ceramic 2pF ±0.25pF PL04-SEMICONDUCTORS Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc.
QL01 QL02 QL03 QL04 QL05 QL08 QL09 QL12 QL13 QL22 QL23 QL24 QL25	4822 209 83067 4822 209 83067 4822 209 83832 4822 209 71781 4822 130 42298 4822 130 42715 4822 130 42298 4822 130 42715 4822 130 42298 4822 130 42715 4822 130 42715 4822 130 42715 4822 130 42715	IC LC4066B IC LC4066B IC LC4001B IC TC9135P Transistor 2SC536SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SC536SP(F, G), etc. Transistor 2SC536SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SA608SP(F, G), etc.
QL26 QL27 QL28	4822 130 42298 4822 130 42715 4822 130 42298	PL14-PIN JACK/SW. CIRCUIT BOARD Transistor 2SC536SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SC536SP(F, G), etc.
JL01 JL02 JL03 JL04 SL01 SL02 SL03 SL04	4822 266 30301 4822 266 30302 4822 266 30304 4822 266 30236 4822 277 21146 4822 277 21146 4822 277 21146 4822 277 21146	PL14-MISCELLANEOUS Terminal, 2P; RCA Terminal, 3P; RCA Terminal, 6P; RCA Terminal, 2P; RCA Slide Switch Slide Switch Slide Switch Slide Switch

REF. DESIG.	PART NO.	DESCRIPTION
QL29	4822 130 42298	PL24-R.G.B. CONNECTOR CIRCUIT BOARD Transistor 2SC536SP(F, G), etc.
JL20 JL21	4822 266 30307 4822 266 30307	Terminal, 21P; RGB Terminal, 21P; RGB
CS50 CS51 CS52	4822 122 32486 4822 122 32486 4822 122 40306	PS04-SELECTOR CIRCUIT BOARD Ceramic 0.01μF +80% -20% Ceramic 0.01μF +80% -20% Ceramic 0.047μF +80% -20%
GE01 GE02 GS01 GS02 GS05 GS06	4822 111 91398 4822 111 91398 4822 111 91401 4822 111 91401 4822 111 91513 4822 111 91513	PS04-CAPACITORS Ceramic 0.01μF +80% -20% Ceramic 0.01μF +80% -20% Ceramic 0.047μF +80% -20% PS04-RESISTORS 100KΩx7 Composite 100KΩx7 Composite 22KΩx5 Composite 22KΩx5 Composite 100KΩx8 Composite 100KΩx8 Composite
Δ RS54 Δ RS55 Δ RS71 Δ R417 Δ R418	4822 116 60337 4822 116 52849 4822 116 52849 4822 116 52849 4822 116 52849	150Ω ±5% 1W 220Ω ±5% ½W 220Ω ±5% ½W 220Ω ±5% ½W 220Ω ±5% ½W
DS01 DS02 DS03 DS06 DS07 DS57	4822 130 80318 4822 130 80318 4822 130 80317 4822 130 33305 4822 130 33305 4822 130 80932	PS04-SEMICONDUCTORS Zener RD6.8J Zener RD6.8J Zener RD5.1J Diode 1SS133 Diode 1SS133 Zener RD6.2J
QE01 QE02 QE03 QE04	4822 209 71783 4822 209 83338 4822 209 83338 4822 209 83338	IC LC7522 IC BA3812L IC BA3812L IC BA3812L
QG01 QG02 QG04 QG05 QG06	4822 209 71784 4822 209 71784 4822 209 83631 4822 209 83631 4822 209 83804	IC LC7535 IC LC7535 IC NJM4558D-D IC NJM4558D-D IC LC4966
QS01 QS02 QS03 QS04 QS05 QS06 QS07 QS08 QS09 QS10	4822 209 83315 4822 209 83315 4822 209 83804 4822 209 83804 4822 209 83804 4822 209 71779 4822 209 83594 4822 209 83836 4822 209 83631 4822 209 83631	IC LC7818 IC LC7818 IC LC4966 IC LC4966 IC LC4966 IC DT5C144E IC MSM59371RS IC μPD4025BC IC NJM4558D-D IC NJM4558D-D
QS11 QS12 QS13 QS14 QS15 QS16 QS17 QS18 QS20	4822 209 71779 4822 209 71778 4822 209 71779 4822 209 71778 4822 130 42715 4822 130 42715 4822 130 42715 4822 130 42715 4822 130 42298	IC DT5C144E IC DT5A144E IC DT5C144E IC DT5A144E Transistor 2SA608SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SA608SP(F, G), etc. Transistor 2SC536SP(F, G), etc.
Q401	4822 209 83631	IC NJM4558D-D
JS01 JS02	4822 265 30457 4822 265 30457	PS04-MISCELLANEOUS Terminal, 6P; RCA Terminal, 6P; RCA

REF. DESIG.	PART NO.	DESCRIPTION
RS91	4822 100 20614	PS34-REC SELECTOR CIRCUIT BOARD Variable Resistor 100KΩ(B)
SS71 SS72	4822 276 20458 4822 273 70114	Push Switch, Surround Rotary Switch, Speaker
Δ RS83 Δ RS84 Δ RS85	4822 111 90724 4822 111 90724 4822 111 90724	PS44-SPEAKER SW. CIRCUIT BOARD Resistor 330Ω ±5% ½W Resistor 330Ω ±5% ½W Resistor 330Ω ±5% ½W
JS81 JS82	4822 267 30834 4822 267 30834	Jack, Headphone Jack, Headphone
SS81	4822 276 20459	Push Switch, Speaker
GS04	4822 111 91401	PS84-FUNCTION-1 CIRCUIT BOARD Resistor Composite 22KΩx5
DS19 DS28	4822 130 33305 4822 130 33305	Diode 1SS133, etc.
QS24 QS25	4822 130 42715 4822 130 42298	Transistor 2SA608SP(F, G), etc. Transistor 2SC536SP(F, G), etc.
C741 C745 C747 C748	4822 122 32486 4822 122 32486 4822 122 32486 4822 122 32486	PT04-SPEAKER TERMINAL CIRCUIT BOARD Ceramic Cap. 0.01μF +80% -20% [N] Ceramic Cap. 0.01μF +80% -20% [N] Ceramic Cap. 0.01μF +80% -20% [N] Ceramic Cap. 0.01μF +80% -20% [N]
JW01 JW02	4822 267 20233 4822 266 30308	Terminal, 8P; Speaker Terminal, 4P; Speaker
CU03 CU04 CU12 CU20 CU21 CU22 CU23	4822 122 32917 4822 122 32143 4822 122 40491 4822 122 40306 4822 122 40306 4822 122 40306 4822 122 40306	PU04-U-COM FL DRIVER CIRCUIT BOARD PU04-CAPACITORS Ceramic 33pF ±5% Ceramic 22pF ±5% Ceramic 0.022μF +80% -20% Ceramic 0.047μF +80% -20% Ceramic 0.047μF +80% -20% Ceramic 0.047μF +80% -20% Ceramic 0.047μF +80% -20%
GC01	4822 111 91393	PU04-RESISTORS 1000Px8 C.R. Composite
GM01 GM02	4822 111 91397 4822 111 91398	100KΩx13 Composite 100KΩx7 Composite
GU01	4822 111 91398	100KΩx7 Composite

REF. DESIG.	PART NO.	
DM11 DM17 DM19 DM25 DM30 DM31	4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 33305	
DU01 DU02 DU03 DU05 DU06 DU12 DU15 DU18 DU19	4822 130 33305 4822 130 33305 4822 130 33305 4822 130 80319 4822 130 33305 4822 130 33305 4822 130 33305 4822 130 80132 4822 130 80132	
QM01 QM02 QM03 QM04 QM05 QM07 QM14	4822 209 71782 4822 209 80401 4822 209 80401 4822 209 80401 4822 209 80401 4822 130 42298 4822 130 42298	
QN01	4822 280 10191	
QU01 QU02 QU03 QU06 QU07 QU08 QU09	4822 209 71787 4822 130 42298 4822 130 42715 4822 130 42298 4822 130 42715 4822 130 42298 4822 130 42715	
JU01 JU02 JU03 JU04 JU05 JU06 JU07 JU08 JU09 JU10 JU13	4822 265 10105 4822 265 10064 4822 265 10059 4822 265 10064 4822 265 10105 4822 265 10063 4822 265 10061 4822 265 10063 4822 265 10105 4822 265 10105 4822 265 10105	
XU01 XU02	4822 242 71775 4822 242 72194	
DM08 DM09 DM10	4822 130 80326 4822 130 80326 4822 130 80326	
DU21	4822 130 80316	
QM15	4822 130 43299	
QU05 QU20	4822 130 42715 4822 130 10009	

OPTION	REF. DESIG.	PART NO.	DESCRIPTION	REF. DESIG.	PART NO.	DESCRIPTION	REF. DESIG.	PART NO.	DESCRIPTION	REF. DESIG.	PART NO.	DESCRIPTION	
CONNECTOR (F, G), etc.	RS91	4822 100 20614	PS34-REC SELECTOR CIRCUIT BOARD Variable Resistor 100KΩ(B)	DM11 }	4822 130 33305	Diode 1SS133, etc.	SU06 SU07	4822 276 11656 4822 276 11656	PU14-MISCELLANEOUS Push Switch Push Switch	D861 D864 D865 D866 D867	4822 130 33948 4822 130 33305 4822 130 33305 4822 130 80091 4822 130 33305	Zener RD5.6J Diode 1SS133, etc. Diode 1SS133, etc. Zener RD12J Diode 1SS133, etc.	
	SS71 SS72	4822 276 20458 4822 273 70114	Push Switch, Surround Rotary Switch, Speaker	DM17 DM19 }	4822 130 33305	Diode 1SS133, etc.	VM01 VU01	4822 134 40853 4822 130 90435	Lamp 12V Display Unit FIP18BMW24	QF01 QF02 QF03	4822 209 83631 4822 209 83631 4822 209 83631	IC NJM4558D-D IC NJM4558D-D IC NJM4558D-D	
	Δ RS83 Δ RS84 Δ RS85	4822 111 90724 4822 111 90724 4822 111 90724	PS44-SPEAKER SW. CIRCUIT BOARD Resistor 330Ω ±5% ¼W Resistor 330Ω ±5% ¼W Resistor 330Ω ±5% ¼W	DM25 DM30 DM31	4822 130 33305 4822 130 33305 4822 130 33305	Diode 1SS133, etc. Diode 1SS133, etc.	WU01 WU02 WU04 WU07 WU08 WU10 WU11 WU12	4822 323 10159 4822 323 10117 4822 323 10169 4822 323 10183 4822 323 10183 4822 323 10159 4822 323 10159 4822 323 10111	Jumper Lead, 5P Jumper Lead, 7P Jumper Lead, 6P Jumper Lead, 8P Jumper Lead, 8P Jumper Lead, 5P Jumper Lead, 5P Jumper Lead, 4P	QH01 QH02	4822 209 83631 4822 209 83631	IC NJM4558D-D IC NJM4558D-D	
	JS81 JS82	4822 267 30834 4822 267 30834	Jack, Headphone Jack, Headphone	DU01 DU02 DU03 DU05 DU06 }	4822 130 33305 4822 130 33305 4822 130 33305 4822 130 80319 4822 130 33305 4822 130 33305	Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Zener RD9.1JB2 Diode 1SS133, etc.				QS51 QS52 QS53 QS54	4822 209 83804 4822 209 83804 4822 130 42715 4822 130 42298	IC LC4966 IC LC4966 Transistor 2SA608SP(F, G), etc. Transistor 2SC536SP(F, G), etc.	
	SS81	4822 276 20459	Push Switch, Speaker	DU12 DU15 }	4822 130 33305	Diode 1SS133, etc.			PU24-TACT SWITCH CIRCUIT BOARD	Q601 Q602 Q603 Q604 Q605	4822 209 83631 4822 209 83631 4822 209 82826 4822 209 71777 4822 209 81763	IC NJM4558D-D IC NJM4558D-D IC TA7629P IC MN3007 IC MN3101	
	GS04	4822 111 91401	PS84-FUNCTION-1 CIRCUIT BOARD Resistor Composite 22KΩx5	DU18 DU19	4822 130 80132	Zener RD3.9J	DM01 }	4822 130 80326	L.E.D. LT3D8B				
	DS19 }	4822 130 33305	Diode 1SS133, etc.	QM01 QM02 QM03 QM04 QM05 QM07 }	4822 209 71782 4822 209 80401 4822 209 80401 4822 209 80401 4822 209 80401 4822 209 80401 4822 130 42298	IC LC7565 IC NJM4558D-D IC NJM4558D-D IC NJM4558D-D IC NJM4558D-D IC NJM4558D-D Transistor 2SC536SP(F, G), etc.	SU03 SU08 }	4822 276 11559 4822 276 11559	PU24-MISCELLANEOUS Push Switch, Tact Push Switch, Tact	Q852 Q853 Q854	4822 130 43299 4822 130 42298 4822 130 42715	Transistor 2SC2910(R, S) Transistor 2SC536SP(F, G), etc. Transistor 2SA608SP(F, G), etc.	
	QS24 QS25	4822 130 42715 4822 130 42298	Transistor 2SA608SP(F, G), etc. Transistor 2SC536SP(F, G), etc.	QM14	4822 130 42298	Transistor 2SC536SP(F, G), etc.	SU39 SU40	4822 276 11559 4822 276 11656	Push Switch, Tact Push Switch, Tact REDLED				
				QN01	4822 280 10191	Elect Buzzer				CN04 }	4822 122 32486	P704-POWER AMP DRIVER CIRCUIT BOARD P704-CAPACITORS Ceramic 0.01μF +80% -20%	
	C741 }	4822 122 32486	PT04-SPEAKER TERMINAL CIRCUIT BOARD Ceramic Cap. 0.01μF +80% -20% [N]	QU01 QU02 QU03 QU06 QU07 QU08 QU09	4822 209 71787 4822 130 42298 4822 130 42715 4822 130 42298 4822 130 42715 4822 130 42298 4822 130 42715	Microprocessor μPD75208 Transistor 2SC536SP(F, G) Transistor 2SA608SP(F, G) Transistor 2SC536SP(F, G) Transistor 2SA608SP(F, G) Transistor 2SC536SP(F, G) Transistor 2SA608SP(F, G)	SU01 SU02 SU04 SU05	4822 276 11559 4822 276 11559 4822 276 11559 4822 276 11559	PU34-TACT SWITCH CIRCUIT BOARD Push Switch, Tact Push Switch, Tact Push Switch, Tact Push Switch, Tact	C715 C716 C735	4822 124 41312 4822 124 41312 4822 124 41312	Elect 23μF 63V Elect 23μF 63V Elect 23μF 63V	
	C747	4822 122 32486	Ceramic Cap. 0.01μF +80% -20% [N]										
	C748	4822 122 32486	Ceramic Cap. 0.01μF +80% -20% [N]										
	JW01 JW02	4822 267 20233 4822 266 30308	Terminal, 8P; Speaker Terminal, 4P; Speaker	JU01 JU02 JU03 JU04 JU05 JU06 JU07 JU08 JU09 JU10 JU13	4822 265 10105 4822 265 10064 4822 265 10059 4822 265 10064 4822 265 10105 4822 265 10063 4822 265 10061 4822 265 10063 4822 265 10105 4822 265 10105 4822 265 10105	Jack, 4P Jack, 6P Jack, 7P Jack, 6P Jack, 4P Jack, 6P Jack, 5P Jack, 6P Jack, 4P Jack, 4P Jack, 4P	C851 C852 C858 C859	4822 122 32486 4822 122 32486 4822 122 40306 4822 122 40306	P604-DOLBY SURROUND CIRCUIT BOARD P604-CAPACITORS Ceramic 0.01μF +80% -20% Ceramic 0.01μF +80% -20% Ceramic 0.047μF +80% -20% Ceramic 0.047μF +80% -20%	R711 R712 Δ R715 Δ R716 Δ R719 Δ R720 R731 Δ R735 Δ R739	4822 100 20524 4822 100 20524 4822 116 60314 4822 116 60314 4822 116 60314 4822 116 60314 4822 100 20524 4822 116 60314 4822 116 60314	4.7KΩ, Trimming 4.7KΩ, Trimming 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible 4.7KΩ, Trimming 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible	
	CU03 CU04 CU12 CU20 CU21 CU22 CU23	4822 122 32917 4822 122 32143 4822 122 40491 4822 122 40306 4822 122 40306 4822 122 40306 4822 122 40306	PU04-U-COM FL DRIVER CIRCUIT BOARD PU04-CAPACITORS Ceramic 33pF ±5% Ceramic 22pF ±5% Ceramic 0.022μF +80% -20% Ceramic 0.047μF +80% -20% Ceramic 0.047μF +80% -20% Ceramic 0.047μF +80% -20% Ceramic 0.047μF +80% -20%	JU01 JU02 JU03 JU04 JU05 JU06 JU07 JU08 JU09 JU10 JU13	4822 265 10105 4822 265 10064 4822 265 10059 4822 265 10064 4822 265 10105 4822 265 10063 4822 265 10061 4822 265 10063 4822 265 10105 4822 265 10105 4822 265 10105	Crystal 32.768KHz Ceramic Bibrator 4.19MHz	XU01 XU02	4822 242 71775 4822 242 72194	PU04-MISCELLANEOUS Jack, 4P Jack, 6P Jack, 7P Jack, 6P Jack, 4P Jack, 6P Jack, 5P Jack, 6P Jack, 4P Jack, 4P Jack, 4P	P604-RESISTORS 47KΩ, Trimming 680Ω ±5% 2W 100Ω ±5% ¼W, Fusible 330Ω ±5% 3W	DN51 DN52 DN55	4822 130 33305 4822 130 33305 4822 130 33305	P704-RESISTORS 4.7KΩ, Trimming 4.7KΩ, Trimming 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible 4.7KΩ, Trimming 10Ω ±5% ¼W, Fusible 10Ω ±5% ¼W, Fusible
	GC01	4822 111 91393	PU04-RESISTORS 1000Px8 C.R. Composite				R630 Δ R851 Δ R852 Δ R853	4822 100 11372 4822 116 60268 4822 111 90744 4822 116 60491		P604-SEMICONDUCTORS Diode 1SS133, etc.	QN51 }	4822 130 43818	Transistor 2SC2878(A)
	GM01 GM02	4822 111 91397 4822 111 91398	100KΩx13 Composite 100KΩx7 Composite	DM08 DM09 DM10	4822 130 80326 4822 130 80326 4822 130 80326	PU14-F.I.P. CIRCUIT BOARD PU14-SEMICONDUCTORS L.E.D. LT3D8B L.E.D. LT3D8B L.E.D. LT3D8B	DS51 }	4822 130 33305		Q701 Q702 Q721	4822 209 83779 4822 209 83779 4822 209 83779	IC μPC1270H IC μPC1270H IC μPC1270H	
	GU01	4822 111 91398	100KΩx7 Composite	DU21	4822 130 80316	Zener MTZJ3.6A	D601 D602	4822 130 33305 4822 130 33305	Diode 1SS133, etc. Diode 1SS133, etc.				
				QM15	4822 130 43299	Transistor 2SC2910(R, S)	Δ D851 Δ D852 Δ D853 Δ D854 Δ D855 Δ D856 Δ D857 Δ D858 D859 D860	4822 130 32508 4822 130 32508 4822 130 32508 4822 130 32508 4822 130 32508 4822 130 32508 4822 130 32508 4822 130 32508 4822 130 32508 4822 130 32508	Diode DSF10C, etc. Diode DSF10C, etc. [N, W, A] Diode DSF10C, etc. Diode DSF10C, etc. [N, W, A] Diode DSF10C, etc. Diode DSF10C, etc. [N, W, A] Diode DSF10C, etc. Diode DSF10C, etc. [N, W, A] Diode DSF10C, etc. Diode DSF10C, etc. [N, W, A]				
			QU05 QU20	4822 130 42715 4822 130 10009	Transistor 2SA608SP(F, G), etc. Photo Unit								

REF. DESIG.	PART NO.	DESCRIPTION
Q703	4822 130 60117	P714-TRANSISTOR (L-CH) CIRCUIT BOARD Transistor 2SC3419(Y)
Q704	4822 130 60117	P724-TRANSISTOR (R-CH) CIRCUIT BOARD Transistor 2SC3419(Y)
Q723	4822 130 60117	P734-TRANSISTOR (DOLBY) CIRCUIT BOARD Transistor 2SC3419(Y)
		P754-POWER AMP/SUPPLY CIRCUIT BOARD
C801	4822 124 21861	Elect 10000 μ F 50V
C802	4822 124 21861	Elect 10000 μ F 50V
△C807	4822 122 30043	Ceramic 0.01 μ F +80% -20%
		P754-CAPACITORS
△RN07	4822 116 60314	10 Ω \pm 5% 1/4W, Fusible
△R751	4822 116 52332	10 Ω \pm 5% 1/4W
△R752	4822 116 52332	10 Ω \pm 5% 1/4W
△R753	4822 116 52332	10 Ω \pm 5% 1/4W
△R754	4822 116 52332	10 Ω \pm 5% 1/4W
△R755	4822 111 91402	0.1 Ω ×2 3W
△R756	4822 111 91402	0.1 Ω ×2 3W
△R757	4822 116 52858	4.7 Ω \pm 5% 1/4W
△R758	4822 116 52858	4.7 Ω \pm 5% 1/4W
△R759	4822 111 90726	10 Ω \pm 5% 2W
△R760	4822 111 90726	10 Ω \pm 5% 2W
△R771	4822 116 52332	10 Ω \pm 5% 1/4W
△R773	4822 116 52332	10 Ω \pm 5% 1/4W
△R775	4822 111 91402	0.1 Ω ×2 3W
△R777	4822 116 52858	4.7 Ω \pm 5% 1/4W
△R779	4822 111 90726	10 Ω \pm 5% 2W
△R802	4822 111 20384	6.8 Ω \pm 5% 1/4W, Fusible
△R803	4822 116 60346	2.2K Ω \pm 5% 1W
△R804	4822 116 60343	1.8K Ω \pm 5% 1W
		P754-SEMICONDUCTORS
△DN01	4822 130 32508	Diode DSF10C, etc.
DN03	4822 130 33305	Diode 1SS133, etc.
DN04	4822 130 33305	Diode 1SS133, etc.
DN05	4822 130 33305	Diode 1SS133, etc.
DN07	4822 130 33305	Diode 1SS133, etc.
△D751	4822 130 32508	Diode DSF10C, etc.
△D752	4822 130 32508	Diode DSF10C, etc.
△D753	4822 130 32508	Diode DSF10C, etc.
△D754	4822 130 32508	Diode DSF10C, etc.
△D771	4822 130 32508	Diode DSF10C, etc.
△D773	4822 130 32508	Diode DSF10C, etc.
△D801	4822 130 33074	Diode 30DF-2
△D802	4822 130 33074	Diode 30DF-2
△D803	4822 130 33074	Diode 30DF-2
△D804	4822 130 33074	Diode 30DF-2
D805	4822 130 33305	Diode 1SS133, etc.
D806	4822 130 33305	Diode 1SS133, etc.
D807	4822 130 80498	Zener RD16J
D808	4822 130 80498	Zener RD16J

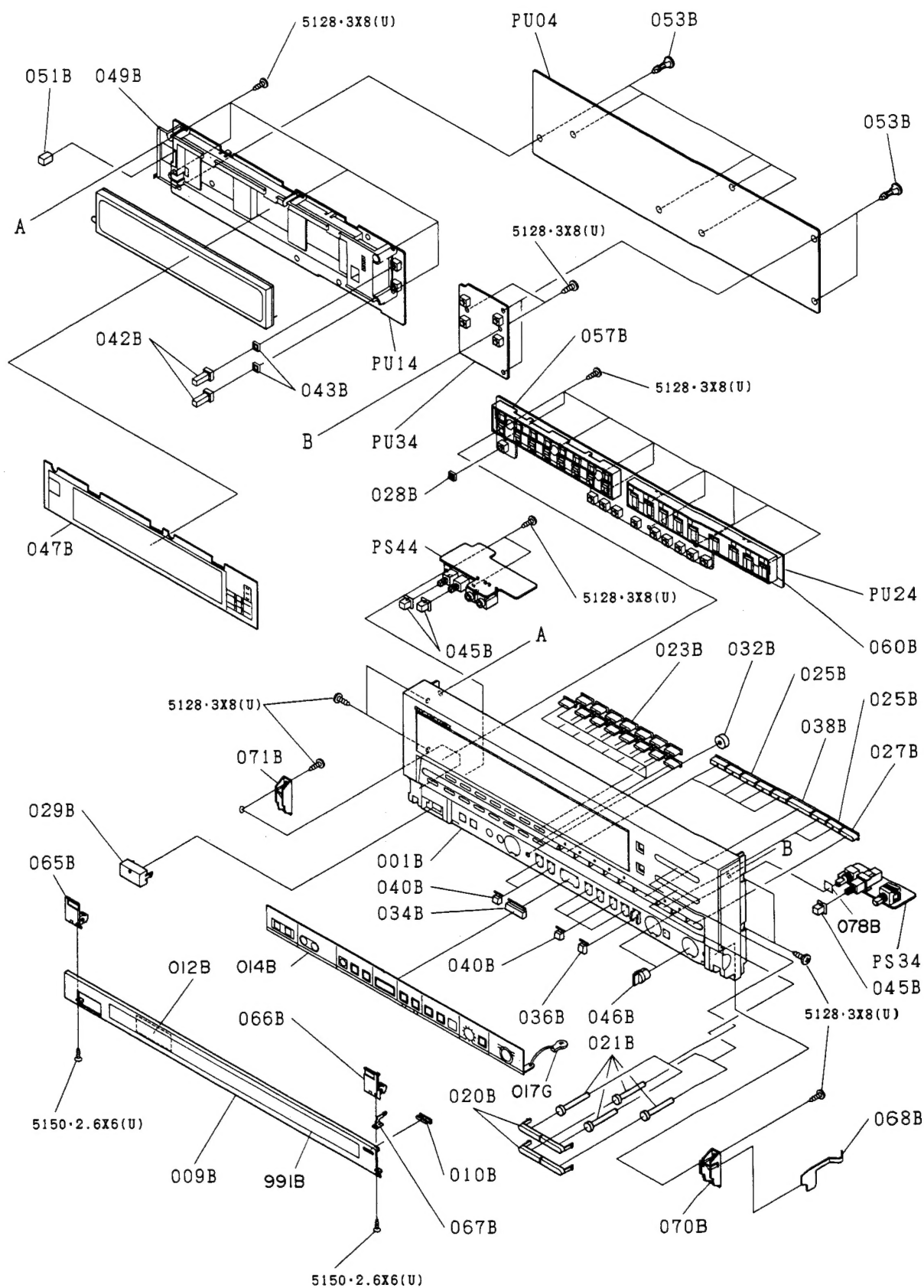
REF. DESIG.	PART NO.	DESCRIPTION
QN01	4822 130 42715	Transistor 2SA608SP(F, G)
QN02	4822 130 42052	Transistor 2SC2785(FF, EF)
QN03	4822 130 42298	Transistor 2SC2458, etc.
QN04	4822 130 42298	Transistor 2SC2458, etc.
QN05	4822 130 42591	Transistor 2SA1175(FF, EF)
QN07	4822 130 42052	Transistor 2SC2785(FF, EF)
QN08	4822 130 42052	Transistor 2SC2785(FF, EF)
QN09	4822 130 42052	Transistor 2SC2785(FF, EF)
Q751	4822 130 60698	Transistor 2SD1714(S, P)
Q752	4822 130 60698	Transistor 2SD1714(S, P)
Q753	4822 130 60695	Transistor 2SB1159(S, P)
Q754	4822 130 60695	Transistor 2SB1159(S, P)
Q771	4822 130 60698	Transistor 2SD1714(S, P)
Q773	4822 130 60695	Transistor 2SB1159(S, P)
△Q801	4822 130 42073	Transistor 2SD1265(O, P) [N, W, A]
	4822 130 61364	Transistor 2SD1913(Q, R) [E]
△Q802	4822 130 43023	Transistor 2SA1306(O, Y) [N, W, A]
	4822 130 61359	Transistor 2SB1274(Q, R) [E]
		P754-MISCELLANEOUS
L751	4822 157 51739	Coil, 1 μ H
L752	4822 157 51739	Coil, 1 μ H
L771	4822 157 51739	Coil, 1 μ H
		P801-REGULATOR CIRCUIT BOARD
△Q803	4822 209 83821	IC NJM78M06FA
		P802-REGULATOR CIRCUIT BOARD
△Q804	4822 209 72332	IC NJM79M06FA

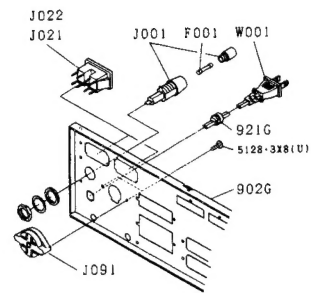
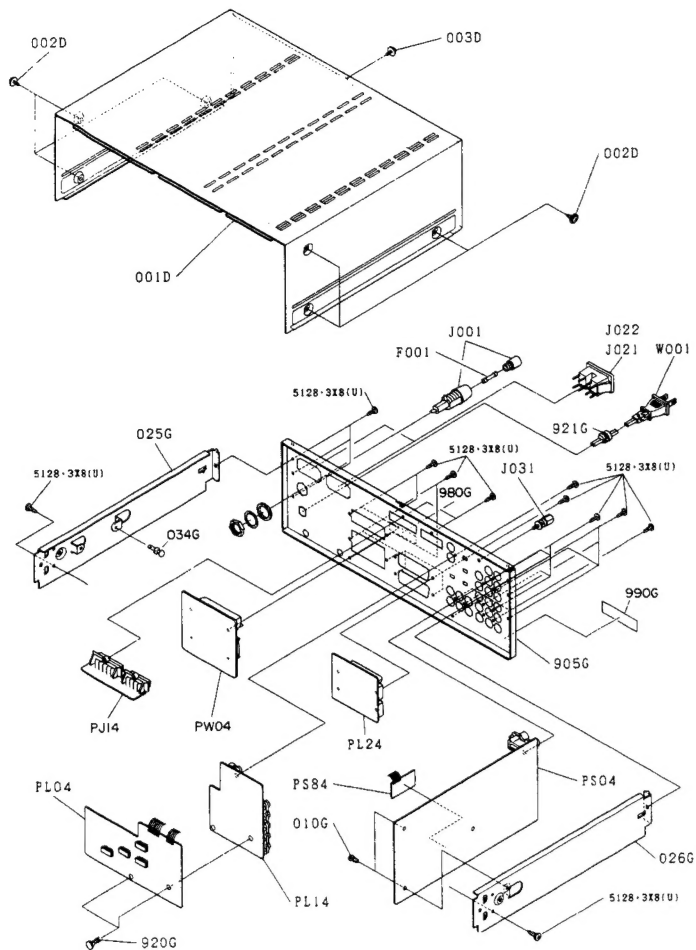
NOTE ON SAFETY:

Symbol △ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol △. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

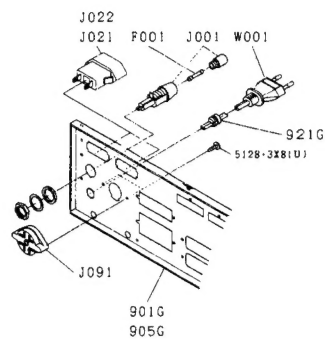
REF. DESIG.	PART NO.	DESCRIPTION
001B	4822 443 40758	Front Panel Assembly
009B	4822 454 11967	Escutcheon, Hinge
010B	4822 412 20998	Knob, Hinge
014B	4822 454 30391	Indicator Assembly
020B	4822 410 25819	Button, Volume
021B	4822 535 71094	Pin, Volume
023B	4822 410 25821	Button, EQ
025B	4822 410 25822	Button, Surround
027B	4822 410 25823	Button, Mode
028B	4822 532 51719	Bushing, Power Switch
029B	4822 410 25829	Button K, Power Switch
032B	4822 410 25825	Button, Timer
034B	4822 410 25826	Button, Timer Mode
036B	4822 410 25827	Button, Clear
038B	4822 410 25828	Button, EQ Flat
040B	4822 410 25782	Button, Tact
042B	4822 381 10895	Lens, Muting
043B	4822 532 51719	Bushing, Muting
045B	4822 410 25783	Button, Push
046B	4822 412 20997	Knob, Volume
051B	4822 466 61642	Spacer
065B	4822 417 10985	Hinge, Left
066B	4822 417 10986	Hinge, Right
067B	4822 278 80277	Contactactor
068B	4822 278 80281	Contactactor
070B	4822 526 50097	Click, Right
071B	4822 526 50096	Click, Left

4. EXPLODED VIEW AND PARTS LIST





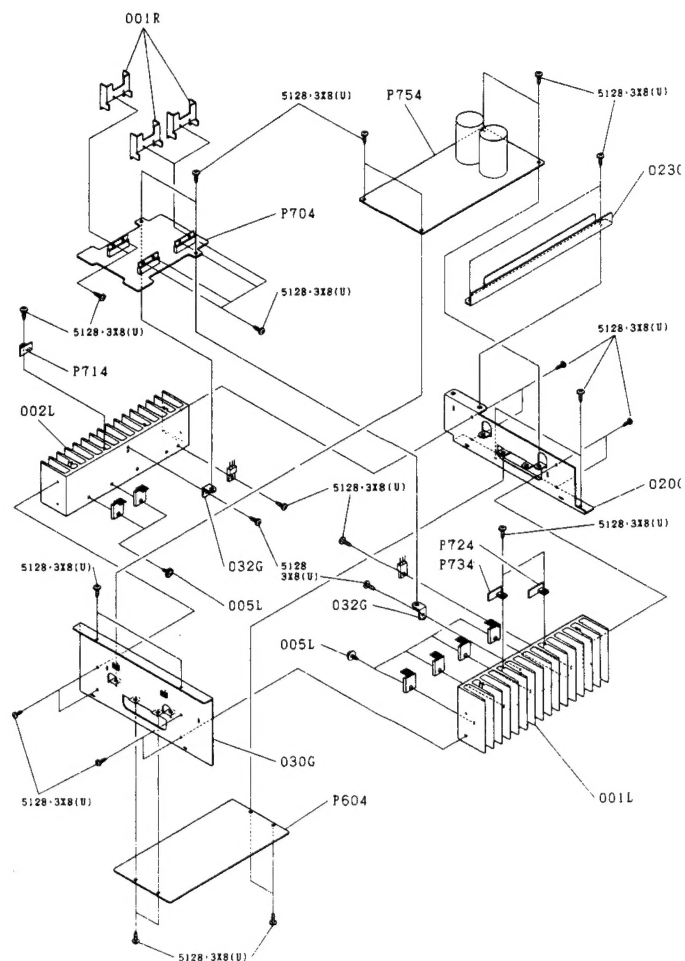
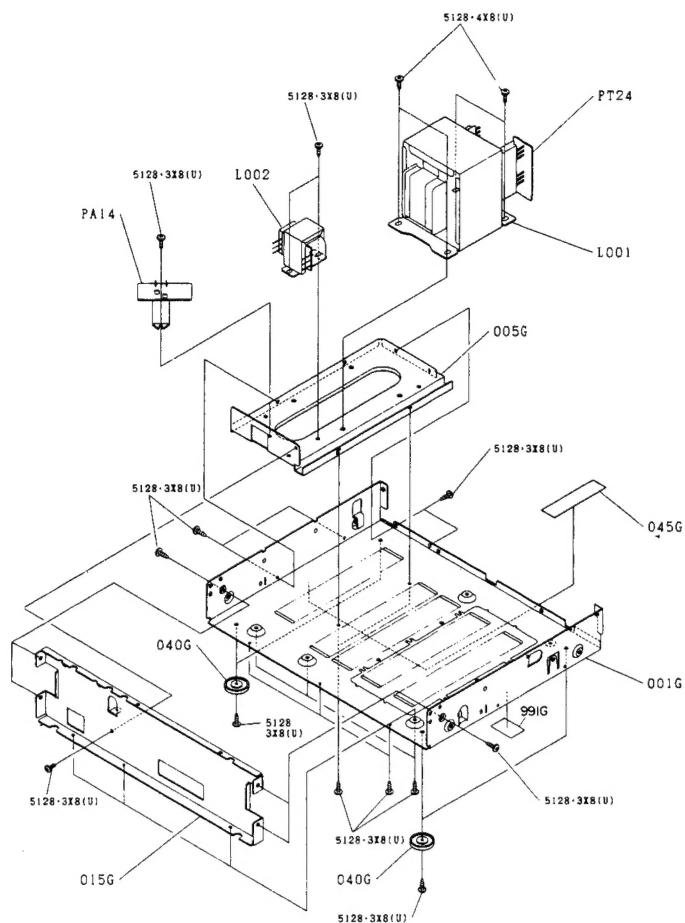
(E) TYPE



(N,W) TYPE

REF. DESIG.	PART NO.	DESCRIPTION
001D	4822 426 51233	Lid, Top Cover
002D	4822 502 12355	B.T. Screw B3 x 8
003D	4822 502 12355	B.T. Screw B3 x 8
△ F001	4822 253 30022	Fuse T1.25A 250V
△ J001	4822 256 30233	Jack, Fuse Holder
△ J021	4822 267 30597	Jack, AC Outlet [N, W, A]
	4822 265 10091	Jack, AC Outlet [E]
△ J022	4822 267 30597	Jack, AC Outlet [N, W, A]
	4822 265 10091	Jack, AC Outlet [E]
J031	4822 290 40297	Terminal, GND
△ J091	4822 272 10236	Voltage Selector [N, W, A]
	4822 272 10235	Voltage Selector [E]

REF. DESIG.	PART NO.	DESCRIPTION
001T	4822 736 20153	User Manual
Z004	4822 218 10203	Remocon Unit (RMC-73)
Z006	4822 138 10155	Battery, SUM-3
Z007	4822 321 22384	Connective Cord, 10P
Z008	4822 321 22385	Connective Cord, 13P
Z009	4822 253 30026	Fuse [E]
Z010	4822 265 10092	Jack, AC Adaptor [E]



REF. DESIG.	PART NO.	DESCRIPTION
040G	4822 462 41186	Leg

REF. DESIG.	PART NO.	DESCRIPTION
△ L001	4822 148 60173	Power Transformer, Main [N,W,A]
	4822 148 60175	Power Transformer, Main [E]
△ L002	4822 148 60166	Power Transformer, Sub [N,W,A]
	4822 148 60174	Power Transformer, Sub [E]